

# भारत का राजपत्र

## The Gazette of India

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इस भाग में बिना पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके  
Separate paging is given to this Part in order that it may be filed as a separate compilation

### नोटिस NOTICE

नीचे लिखे भारत के असाधारण राजपत्र 21 जनवरी 1966 तक प्रकाशित किये गये थे।

The undermentioned Gazettes of India Extraordinary were published up to the 21st January 1966:—

सं० Issue No.	संख्या और तारीख No. and Date	द्वारा जारी किया गया Issued by	विषय Subject
19	No. 11-ITC(PN)/66, dated 18th January, 1966.	Ministry of Commerce.	Import of (i) 'Fruits' all sorts, excluding coconuts and cashewnuts, fresh, dried, salted or preserved, n.o.s. and excluding Dates (S. No. 21 (a)/IV), (ii) Asafoetida (S. No. 31/V), (iii) Cumin seeds, and (iv) Medicinal herbs from Afghanistan during 1965-66 Trade Arrangement period.
19a	No. 12-ITC(PN)/66, dated 20th January, 1966.	Do.	Export Promotion Scheme— Inclusion of item "Cigarettes" thereunder.
20	No. 13-ITC(PN)/66, dated 20th January, 1966.	Do.	Import Policy for Delivery hose for trailer pumps (Sr. No. 54/V) and hose made of canvas impregnated with rubber (Sr. No. 55/V)—April, 1965—March, 1966.
21	No. 14-ITC(PN)/66, dated 21st January, 1966. No. 15-ITC(PN)/66, dated 21st January, 1966.	Do.	E.P. Scheme for Pearls. U.S. AID Programme—chartering of Ocean Vessels and, embargo on certain vessels for transport of AID financed goods.

ऊपर लिखे असाधारण राजपत्रों की प्रतियाँ प्रकाशन प्रबन्धक, सिविल साइम्स, दिल्ली के नाम मांगपत्र भेजने पर भेज दी जाएंगी। मांगपत्र प्रबन्धक के पास इन राजपत्रों के जारी होने की तारीख से दस दिन के भीतर पहुंच जाने चाहिए।

Copies of the Gazettes Extraordinary mentioned above will be supplied on Indent to the Manager of Publications, Civil Lines, Delhi. Indents should be submitted so as to reach the Manager within ten days of the date of issue of these Gazettes.

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(रक्षा मन्त्रालय की छोड़कर) भारत सरकार के मंत्रालयों तथा उच्चतम न्यायालय द्वारा जारी की गई विधीतर नियमों, विनियमों तथा आदेशों और संकल्पों से संबंधित अधिसूचनाएं

**Notifications relating to Non-Statutory Rules, Regulations, Orders and Resolutions issued by the Ministries of the Government of India (other than the Ministry of Defence) and by the Supreme Court**

## राष्ट्रपति सचिवालय

नई दिल्ली दिनांक 26 जनवरी 1966

सं० 3-प्रेज/66—राष्ट्रपति सन् 1966 के सत्रहवें गणतन्त्र दिवस के अवसर पर निम्नांकित अधिकारियों को उनकी विशेष सेवाओं के लिए राष्ट्रपति का पुलिस तथा आग्न शमन सेवा पदक प्रदान करने हैं:—

श्री गुलाम हसन पीर,  
पुलिस अधीक्षक, अपराध अनुसन्धान विभाग,  
विशेष शाखा,  
जम्मू एवं कश्मीर ।

श्री मोहम्मद कादिर अली, आई० पी० एम०,  
पुलिस महा उप निरीक्षक,  
सेंट्रल रेंज, बंगलोर,  
मैसूर ।

श्री गुरुभक्त सिंह शिल, आई० पी० एम०,  
वरिष्ठ पुलिस अधीक्षक, अमृतसर,  
पंजाब ।

श्री प्रसाद कुमार वसु, आई० पी० एम०,  
पुलिस महा उप-निरीक्षक,  
गुप्तवार्ता शाखा  
पश्चिम बंगाल ।

श्री हेमबहादुर राव,  
असिस्टेंट कमांडेंट (स्थानापन्न),  
ईस्टर्न कंटिपेर राईफल,  
2री बटालियन, सलुआ,  
मिदनापुर,  
पश्चिम बंगाल ।

श्री रामनाथपुरम् मुन्नमथ्य अय्यर कृष्णन्,  
केन्द्रीय गुप्तवार्ता अधिकारी,  
सहायक गुप्तवार्ता ब्यूरो,  
मद्रास ।

2. ये पदक राष्ट्रपति के पुलिस तथा आग्न शमन सेवा पदक से सम्बन्धित नियमों के नियम 4(ii) के अन्तर्गत दिये जा रहे हैं ।

सं० 4-प्रेज/66—राष्ट्रपति, सन् 1966 के सत्रहवें गणतन्त्र दिवस के अवसर पर निम्नांकित अधिकारियों को उनकी सहायनीय सेवाओं के लिए पुलिस पदक प्रदान करने हैं:—

श्री रामस्वामी वेकटमन,  
पुलिस उपाधीक्षक, अष्टाचार निरोध ब्यूरो,  
आन्ध्र प्रदेश ।

श्री बीमराला रेवती राव,  
पुलिस उपाधीक्षक (स्थानापन्न),  
नरसरावपेट, गुन्टुर जिला,  
आन्ध्र प्रदेश ।

श्री अनाला श्रीरामा राव,  
पुलिस उपाधीक्षक (अस्थायी),  
आन्ध्र प्रदेश ।

श्री कामरुद्दीन वेंकट जयपाल राव,  
पुलिस निरीक्षक, अष्टाचार-निरोध ब्यूरो,  
बम्मम्,  
आन्ध्र प्रदेश ।

श्री मोहम्मद अली अन्सारी,  
पुलिस निरीक्षक,  
विशालापट्टनम दक्षिण,  
आन्ध्र प्रदेश ।

श्री बोम्मन नारायणस्वामी,  
पुलिस निरीक्षक (स्थानापन्न),  
अपराध अनुसन्धान विभाग,  
अपराध शाखा, हैदराबाद,  
आन्ध्र प्रदेश ।

श्री मोहम्मद अली,  
हैड कान्स्टेबल,  
अपराध अनुसन्धान विभाग,  
विशेष शाखा, हैदराबाद,  
आन्ध्र प्रदेश ।

श्री घना कान्त मेघा, आई० पी० एम०,  
पुलिस अधीक्षक,  
विशेष शाखा, शिलांग,  
असम ।

श्री राजेश्वर लाल, आई० पी० एम०,  
पुलिस महा उप-निरीक्षक,  
बिहार ।

श्री रामेश्वर लाल,  
कमांडेंट, बिहार मिलिट्री पुलिस-V,  
बिहार ।

श्री अवधेश कुमार सिंह,  
पुलिस उपाधीक्षक,  
अपराध अनुसन्धान विभाग,  
विशेष शाखा, पटना,  
बिहार ।

श्री नन्दजी सिंह,  
विंग कमान्डर,  
बिहार मिलिट्री पुलिस-II  
बिहार ।

श्री दत्ताजीराव दागाजीराव देवरे,  
उप कमांडेंट,  
स्टेट रिजर्व पुलिस फोर्स, ग्रुप VI,  
गुजरात ।

श्री मंगलभाई सोमभाई वलंद,  
पुलिस उप-निरीक्षक,  
अपराध अनुसन्धान विभाग,  
गुजरात ।

श्री लाभशंकर लालूगम व्यास,  
पुलिस उप-निरीक्षक (स्थानापन्न),  
अहमदाबाद शहर,  
गुजरात ।

श्री पद्माकर गोविन्द काणिक,  
पुलिस उप-निरीक्षक (स्थानापन्न),  
अहमदाबाद शहर,  
गुजरात ।

श्री सुरेन्द्र नाथ, आई० पी० एस०,  
पुलिस महा उप-निरीक्षक,  
अपराध अनुसन्धान विभाग,  
जम्मू एवं कश्मीर ।

श्री विश्व मित्र वन्दशी, आई० पी० एस०,  
पुलिस महा उप-निरीक्षक,  
जम्मू रेंज,  
जम्मू एवं कश्मीर ।

श्री मोहम्मद सुल्तान,  
पुलिस अधीक्षक,  
जम्मू एवं कश्मीर ।

श्री अब्दुल मर्जद लोने,  
पुलिस उपाधीक्षक,  
अपराध अनुसन्धान विभाग,  
जम्मू एवं कश्मीर ।

श्री कोरती यूसुफ मोईदीन कुट्टी,  
पुलिस उप-निरीक्षक,  
अपराध अनुसन्धान विभाग,  
अपराध शाखा,  
केरल ।

श्री जगदीश चन्द्र दीक्षित, आई० पी० एस०,  
पुलिस महा उप-निरीक्षक,  
अपराध तथा रेलवे, भोपाल,  
मध्य प्रदेश ।

श्री बनवारीलाल श्रीवास्तव,  
पुलिस उपाधीक्षक,  
बिलासपुर जिला,  
मध्य प्रदेश ।

श्री ब्रैजनाथ शिवनाथ मेहता,  
नगर पुलिस अधीक्षक, जबलपुर,  
मध्य प्रदेश ।

श्री लक्ष्मी प्रसाद शुक्ल,  
पुलिस उपाधीक्षक, छतरपुर,  
मध्य प्रदेश ।

श्री बैजामिन तालिम,  
रिजर्व पुलिस निरीक्षक,  
मुरेना जिला,  
मध्य प्रदेश ।

श्री गुणानन्द शर्मा,  
वस्त्राणी कमाण्डर,  
12वीं बटालियन, विशेष सशस्त्र दल,  
मध्य प्रदेश ।

श्री गौरी शंकर,  
हैड कान्स्टेबल सं० 16,  
छतरपुर जिला,  
मध्य प्रदेश ।

श्री भगवान दास,  
हैड कान्स्टेबल सं० 441,  
सागर जिला,  
मध्य प्रदेश ।

श्री निरेणवल्लय रस्तुम मुवर्ण, आई० पी० एस०,  
पुलिस अधीक्षक, मुख्यालय,  
चौकसी तथा भ्रष्टाचार-निरोध,  
मद्रास ।

श्री कण्ठमगल श्रीरामचन्द्र चन्द्रशेखरन,  
असिस्टेन्ट कमिशनर आफ पुलिस (स्थानापन्न),  
मद्रास शहर ।

श्री वेलोर लक्ष्मण पिल्लै पार्थसारथी,  
पुलिस निरीक्षक,  
अपराध अनुसन्धान विभाग, विशेष शाखा,  
मद्रास ।

श्री पथालै पथालै,  
पुलिस निरीक्षक,  
चौकसी तथा भ्रष्टाचार-निरोध निदेशालय,  
मद्रास ।

श्री तिम्माप्पा गौण्डर दोरैराज,  
पुलिस निरीक्षक (स्थानापन्न),  
अपराध अनुसन्धान विभाग, अपराध शाखा,  
मद्रास ।

श्री नल्लशिवं पिल्लै रामस्वामी,  
पुलिस उप-निरीक्षक (स्थानापन्न),  
तिरुनलवेली जिला,  
मद्रास ।

श्री मोघाकला चिन्नास्वामी वेणुगोपाल,  
हैड कान्स्टेबल सं० 190,  
मद्रास शहर ।

श्री देवप्रियम् सेमुअल,  
हैड कान्स्टेबल सं० 465,  
मदुराय जिला,  
मद्रास ।

श्री मुरलीधर गणेश कुलकर्णी,  
पुलिस उपाधीक्षक,  
नामिक जिला,  
महाराष्ट्र ।

श्री जयवन्त विठ्ठल पाई,  
पुलिस निरीक्षक,  
बृहत् बम्बई,  
महाराष्ट्र ।

श्री नीलकण्ठ केशव पाटिल,  
पुलिस निरीक्षक,  
जलगांव शहर,  
महाराष्ट्र ।

श्री चिदम्बर लिंगो पाटिल,  
पुलिस उप-निरीक्षक, सेलैक्शन ब्रेड,  
बृहत् बम्बई,  
महाराष्ट्र ।

श्री सुरेश गजानन पेन्डसे,  
पुलिस उप-निरीक्षक, सेलेक्शन ग्रेड,  
बृहत बम्बई,  
महाराष्ट्र ।

श्री अप्पा यशवन्त राव,  
हेड कान्स्टेबल,  
बृहत बम्बई,  
महाराष्ट्र ।

श्री विनायक गोविन्द देशमुख,  
हेड कान्स्टेबल (निशस्त्र), जलगांव जिला,  
महाराष्ट्र ।

श्री कुक्की मुन्नहण्य शास्त्री श्रीकान्त शास्त्री,  
अभिस्टेन्ट कमिश्नर आफ पुलिस,  
विशेष शाखा, बंगलौर शहर,  
मैसूर ।

श्री रामचन्द्र दत्तात्रेय यादव  
पुलिस निरीक्षक,  
मैसूर ।

श्री मुनिसिद्धाप्पा हनुमता सेटी,  
पुलिस निरीक्षक,  
मैसूर ।

श्री कनिकास्वामी,  
सहायक पुलिस उप-निरीक्षक,  
आर्मड रिजर्व,  
मैसूर ।

श्री विनायक महंभावा,  
पुलिस अधीक्षक (स्थानापन्न), धनकणाल,  
उड़ीसा ।

श्री नरसिंह संतरा,  
पुलिस उपाधीक्षक, चौकसी,  
उड़ीसा ।

श्री गंगाधर साहू,  
पुलिस उपाधीक्षक, चौकसी,  
उड़ीसा ।

श्री वेदुल सूर्यनारायण,  
पुलिस निरीक्षक, चौकसी,  
उड़ीसा ।

श्री शशिभूषण महन्ती,  
पुलिस निरीक्षक (स्थानापन्न), चौकसी,  
उड़ीसा ।

श्री पद्म अजीत रोशा, आई० पी० एस०,  
ब्रिगेड पुलिस अधीक्षक,  
फिरोजपुर, पंजाब ।

श्री गुरपूरत सिंह, आई० पी० एस०,  
कुमाहेट, पंजाब सशस्त्र पुलिस,  
पंजाब ।

श्री देस राज सिंह,  
पुलिस उपाधीक्षक (स्थानापन्न),  
पंजाब ।

श्री ओम दत्त जोशी,  
पुलिस निरीक्षक (स्थानापन्न),  
पंजाब ।

श्री तेज सिंह,  
कमांडेंट, 7वीं बटालियन,  
राजस्थान आर्मड कान्स्टेबुलरी,  
राजस्थान ।

श्री लेख राम,  
पुलिस उपाधीक्षक (स्थानापन्न),  
राजस्थान ।

श्री जगदीश राय चावला,  
पुलिस निरीक्षक,  
राजस्थान ।

श्री केसरी सिंह,  
पुलिस निरीक्षक,  
राजस्थान ।

श्री पितु सरन रातूरी, आई० पी० एस०,  
पुलिस महा निरीक्षक के सहायक,  
उत्तर प्रदेश ।

सैयद अख्तर अब्बास, आई० पी० एस०,  
कमांडेंट, 11वीं बटालियन,  
प्रादेशिक आर्मड कान्स्टेबुलरी,  
उत्तर प्रदेश ।

मिर्जा मुहम्मद अहसान,  
पुलिस उपाधीक्षक,  
अपराध शाखा, अपराध अनुसन्धान विभाग,  
उत्तर प्रदेश ।

श्री हर प्रसाद शर्मा,  
पुलिस उपाधीक्षक,  
भ्रष्टाचार-निरोध, अपराध अनुसन्धान विभाग,  
बरेली,  
उत्तर प्रदेश ।

श्री श्री पाल सिंह,  
सूबेदार एंड्रजुटेड, 3री बटालियन,  
प्रादेशिक आर्मड कान्स्टेबुलरी, लखनऊ,  
उत्तर प्रदेश ।

श्री फतेह बहादुर सिंह,  
पुलिस निरीक्षक, आजमगढ़,  
उत्तर प्रदेश ।

श्री ब्रह्मचत नहरी, आई० पी० एस०,  
पुलिस उपायुक्त,  
कलकत्ता ।

श्री पियूष कान्ति मजूमदार,  
पुलिस उपाधीक्षक (स्थानापन्न),  
पश्चिम बंगाल पुलिस बेतार,  
पश्चिम बंगाल ।

श्री देव प्रसाद मुखर्जी,  
पुलिस निरीक्षक,  
गुप्तचर विभाग,  
कलकत्ता ।

श्री आर्थिल केन्दोत माधवन त्रिवियार, आई० पी० एस०,  
उप निदेशक, सहायक गुप्तवार्ता ब्यूरो,  
मद्रास ।

श्री फनीन्द्र नाथ बनर्जी, आई० पी० एस०,  
उप निदेशक, सहायक गुप्तवार्ता ब्यूरो,  
कलकत्ता ।

श्री लक्ष्मण राव अड्डो, आई० पी० एस०,  
संयुक्त उप निदेशक, गुप्तवार्ता ब्यूरो,  
नई दिल्ली ।

श्री धारुवाकर नंजप्पा मुनिबेकटप्पा,  
केन्द्रीय उप गुप्तवार्ता अधिकारी,  
बंगलौर ।

श्री बसन्त राम बाली,  
केन्द्रीय सहायक गुप्तवार्ता अधिकारी-1,  
गुप्तवार्ता ब्यूरो,  
नई दिल्ली।

श्री जोत राम,  
पुलिस उपाधीक्षक, विशेष पुलिस स्थापना, फाउ-स्क्वाड-1,  
नई दिल्ली।

श्री गुरुराव सुबराव कुलकर्णी,  
पुलिस निरीक्षक, विशेष पुलिस स्थापना,  
नई दिल्ली।

श्री मित्रा नन्द चतुर्वेदी, आई० पी० एम०,  
पुलिस महा उप-निरीक्षक,  
केन्द्रीय सुरक्षित पुलिस,  
नई दिल्ली।

श्री गर्जन सिंह,  
पुलिस उप-निरीक्षक,  
केन्द्रीय पुलिस ट्रेनिंग कालिज,  
आबू।

श्री रमण बाल कृष्ण वारियर,  
कमांडेंट, स्पेशल एमर्जेन्सी फॉर्स तथा  
ज्वाइंट डायरेक्टर, सुरक्षा,  
रेलवे बोर्ड, रेलवे मंत्रालय,  
नई दिल्ली।

श्री गुरदयाल सिंह,  
सहायक महानिरीक्षक, रेलवे सुरक्षा दल तथा  
ज्वाइंट डायरेक्टर, सुरक्षा,  
रेलवे बोर्ड, रेलवे मंत्रालय,  
नई दिल्ली।

श्री चन्द्रोद्य चेखवरी रुग्मत,  
सुरक्षा अधिकारी, पूर्वी रेलवे,  
कलकत्ता।

श्री बीरमन तमंग,  
हैड रक्षक सं० 3682,  
रेलवे सुरक्षा दल,  
दक्षिण-पूर्वी रेलवे,  
कलकत्ता।

2. ये पदक पुलिस पदक से सम्बन्धित नियमों के नियम 4(II) के अन्तर्गत दिये जा रहे हैं।

सं० 6-प्रेज/66—राष्ट्रपति, जम्मू एवं कश्मीर के निम्नांकित अधिकारियों को उनकी वीरता के लिये पुलिस पदक प्रदान करते हैं:—

#### अधिकारियों का नाम तथा पद

श्री ओ० एन० धर,  
पुलिस निरीक्षक,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर। (स्वर्गीय)

श्री बशीर अहमद,  
पुलिस कान्स्टेबल सं० 605,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर। (स्वर्गीय)

#### सेबाओं का विवरण जिनके लिये पदक प्रदान किये गये

9 अगस्त 1965 को 100 से अधिक सशस्त्र पाकिस्तानी हमलावर रेडियो स्टेशन तथा अन्य प्रमुख संस्थापनों पर आक्रमण करने के विचार से चोरी से श्रीनगर की सीमा के बाहर तक पहुँच

गये। सूचना प्राप्त होते पर कश्मीर सशस्त्र पुलिस को एक प्लाटून तुरन्त उस मोर्चे पर गयी। शहर की बाहरी सीमा पर पहुँचने के तुरन्त बाद ही पुलिस दल पर घुसपैठियों ने स्वचालित सशस्त्रों से हमला कर दिया। संख्या में बहुत कम होने के बावजूद, छोटी पुलिस टुकड़ी ने शक्तिशाली प्रत्याक्रमण किया और अन्ततः 2 आक्रमण-कारियों को मार तथा 3 को घायल कर सुनियोजित आक्रमण को विफल कर दिया।

इस मुठभेड़ में श्री ओ० एन० धर तथा श्री बशीर अहमद ने उत्कृष्ट वीरता तथा उच्च स्तर की कर्तव्यपरायणता का परिचय दिया और कर्तव्य पालन करते हुए अपने प्राणों का भी बलिदान कर दिया।

2. ये पदक पुलिस पदक नियमावली के नियम 4(1) के अन्तर्गत वीरता के लिये दिये जा रहे हैं तथा फलस्वरूप नियम 5 के अन्तर्गत स्वीकृत भत्ता भी दिनांक 9 अगस्त, 1965 से दिया जायेगा।

सं० 6-प्रेज/66—राष्ट्रपति, जम्मू एवं कश्मीर के निम्नांकित अधिकारियों को उनकी वीरता के लिये पुलिस पदक प्रदान करते हैं:—

#### अधिकारियों के नाम तथा पद

श्री राम लाल,  
पुलिस सहायक उप-निरीक्षक,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर। (स्वर्गीय)

श्री भोला सिंह,  
हैड कान्स्टेबल सं० 672,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर। (स्वर्गीय)

श्री हरखन्म सिंह,  
हैड कान्स्टेबल सं० 679,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर। (स्वर्गीय)

श्री मकखन लाल,  
हैड कान्स्टेबल सं० 795,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर। (स्वर्गीय)

श्री अब्दुल रशीद,  
पुलिस कान्स्टेबल सं० 85,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर। (स्वर्गीय)

श्री गुलाम हसन,  
पुलिस कान्स्टेबल सं० 795,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर। (स्वर्गीय)

श्री अब्दुल रशीद,  
पुलिस कान्स्टेबल सं० 468,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर। (स्वर्गीय)

श्री मुहम्मद मिर्दाक,  
पुलिस कान्स्टेबल सं० 386,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर। (स्वर्गीय)

श्री मुहम्मद यक़मूद,  
पुलिस कान्स्टेबल सं० 373,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर। (स्वर्गीय)

श्री चतरू राम,  
पुलिस कान्स्टेबल सं० 320,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर । (स्वर्गीय)

श्री प्रीतम सिंह,  
पुलिस कान्स्टेबल सं० 720,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर । (स्वर्गीय)

श्री गुलाम अहमद ज़रगर,  
पुलिस कान्स्टेबल सं० 640,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर । (स्वर्गीय)

श्री गुरदाम चन्द,  
पुलिस कान्स्टेबल सं० 509,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर । (स्वर्गीय)

श्री बंसी लाल,  
पुलिस कान्स्टेबल सं० 504,  
कश्मीर सशस्त्र पुलिस,  
जम्मू एवं कश्मीर ।

#### सेवाओं का विवरण जिनके लिये पदक प्रदान किये गये

9 अगस्त 1965 को पुलिस के सहायक उप-निरीक्षक राम लाल की अधीनता में कश्मीर सशस्त्र पुलिस की एक प्लाटून श्रीनगर शहर की बाहरी सीमा पर स्थित बीमना पुल के पहर पर तैनात थी। शाम की चार बजे स्वचालित हथियारों से लैस पाकिस्तानी हमलावरों की एक कम्पनी ने पुलिस दल पर हमला कर दिया। यद्यपि पुलिस दल की संख्या बहुत थोड़ी थी और उनके पास केवल 303 की राईफलें ही थीं, फिर भी उस छोटे दल ने दृढ़ निश्चय के साथ हमलावरों को उन्मूलन किया। भारी एवं केन्द्रित हमले के परिणामस्वरूप बहुत से पुलिस जवानों ने अपने मोर्चों की रक्षा करने हुए अपनी जान दे दी। इस जानी तुकसान की परवाह न करते हुए प्लाटून कमांडर ने बहुसंख्यक शत्रु से लड़ने के लिये अपने जवानों का साहस बढ़ाना जारी रखा। जब पुलिस दल के पास गोला-बारूद कम पड़ गया तब शत्रु नज़दीक पहुंचने में सफल हो गया और पुलिस दल को हथियार डालने के लिये कहा। किन्तु श्री राम लाल ने हथियार डालने से इन्कार कर दिया और संगीत से तब तक शत्रु का सामना करता रहा जब तक कि वह एक हथगोले से मारा नहीं गया।

इस मुठभेड़ में दल 14 पुलिस जवानों ने उत्कृष्ट वीरता तथा कर्तव्यपरायणता का परिचय दिया और कर्तव्य पालन में उनमें से 13 ने अपने प्राणों का बलिदान कर दिया।

2. ये पदक पुलिस पदक नियमावली के नियम 4(I) के अन्तर्गत वीरता के लिये दिये जा रहे हैं तथा फलस्वरूप नियम 5 के अन्तर्गत स्वीकृत भत्ता भी दिनांक 9 अगस्त 1965 से दिया जायेगा।

सं० 7-ब्रेज़/66—राष्ट्रपति, जम्मू एवं कश्मीर के निम्नांकित अधिकारी को उसकी वीरता के लिए पुलिस पदक प्रदान करने हैं :—

#### अधिकारी का नाम तथा पद

श्री भगत मनब्रत,  
पुलिस उप-निरीक्षक,  
जम्मू एवं कश्मीर । (स्वर्गीय)

#### सेवाओं का विवरण जिनके लिये पदक प्रदान किया गया

अगस्त 1965 में पाकिस्तानी हमलावर साधारण नागरिकों के बेश में मंडी थाने में घुस आये। श्री भगत मनब्रत को, जो वहां थाना अधिकारी थे, घुसपैठियों की यथार्थता के बारे में शक हो गया

और उसने उन्हें ललकारा। इस पर हमलावरों ने थाने के लोगों पर हमला कर दिया। श्री भगत एकमात्र उपलब्ध हथियार बेलचा लेकर उनसे लड़ने लगे और उनमें से एक को मार दिया। इससे पहले कि दूसरे हमलावर उसे पकड़ पाते, वह वहां से बच निकला। उसकी इस कार्यवाही से अन्य पुलिस जवानों को घुसपैठियों की भारी संख्या द्वारा थाने पर कब्जा किये जाने से पहले ही कार्रवाई चलावनी और आवश्यक समय मिल गया। श्री भगत मंडी में ही रहे और घुसपैठियों के सम्बन्ध में सूचना एकत्रित कर सिविल तथा नैतिक अधिकारियों को देने रहे। बाद में गुप्त सूचना एकत्रित करते हुए घुसपैठियों ने श्री भगत को पकड़ लिया और मार डाला।

इस तरह श्री भगत मनब्रत ने उत्कृष्ट वीरता तथा कर्तव्य-परायणता का प्रदर्शन किया जिसके लिये उसने अपना जीवन तक बलिदान कर दिया।

2. यह पदक पुलिस पदक नियमावली के नियम 4 (I) के अन्तर्गत वीरता के लिये दिया जा रहा है तथा फलस्वरूप नियम 5 के अन्तर्गत स्वीकृत भत्ता भी दिया जायेगा।

वार्ड० डी० गण्डेविया, राष्ट्रपति के सचिव

#### योजना आयोग

नई दिल्ली, दिनांक 21 जनवरी 1966

सं० एफ० 15/1/65-समन्वय—प्रॉ० एन० बी० सोबानी, गोखले राजनीतिक एवं आर्थिक संस्थान, पूना ने, योजना आयोग संकल्प संख्या एफ० 15/1/65-समन्वय दिनांक 26 फरवरी, 1965 में गठित राष्ट्रीय योजना परिषद् की सदस्यता से त्यागपत्र दे दिया है, क्योंकि वे संयुक्त राष्ट्र द्वारा सौंपे गये कार्य पर विदेश जा रहे हैं।

#### आवंट

आदेश दिया जाता है कि इस संकल्प की एक प्रति सब सम्बन्धित व्यक्तियों को भेज दी जाय तथा इसे भारत सरकार के राजपत्र में प्रकाशित किया जाय।

के० ए० पी० म्हीवेन्मन, संयुक्त सचिव

#### आयुर्वेद तथा अन्य औषधि प्रणालियों से सम्बन्धित पैनल

सं० एच० एल० एच० 6(11)/64—संकल्प संख्या एच० एल० एच० 6(11)/64, दिनांक 4 मई 1965 में आंशिक संशोधन करते हुए, एतद् द्वारा सूचित किया जाता है कि आयुर्वेद तथा अन्य औषधि प्रणालियों से सम्बन्धित पैनल के सदस्यों की सूची में निम्न नाम जोड़ लिए जायें :—

1. कर्नल बी० एल० तनेजा, निदेशक, **सदस्य**  
चिकित्सा अनुसंधान की भारतीय परिषद्,  
नई दिल्ली।
2. डा० बी० के० आनन्द, प्राफेसर, **सदस्य**  
जीव क्रिया विज्ञान,  
अखिल भारतीय चिकित्सा विज्ञान संस्थान,  
नई दिल्ली।
3. डा० एम० बी० रामनन्, वरिष्ठ कार्य **सदस्य**  
चिकित्सक,  
सिद्ध, आयुर्वेदिक अध्ययन और अनुसंधान संस्थान,  
जामनगर।
4. डा० आर्यानन्द, प्रधानाचार्य, **सदस्य**  
आयुर्वेदिक कालेज, सतना, (मध्य प्रदेश)।
5. कविराज राधे लाल गलवान, **सदस्य**  
आयुर्वेदिक अस्पताल, बस्ती मार्ग, दिल्ली।
6. श्री जी० बी० पुराणिक, ध्रुतपापेश्वर, **सदस्य**  
पनवेल-कोलावा (महाराष्ट्र)

7. कवि राज आशुतोष मजुमदार, **सदस्य**  
90/8 कनौट सर्कस, नई दिल्ली ।
8. हकीम महमूद एहमद खान, **सदस्य**  
5133, शरीफ मंजिल, बल्ली मार्ग,  
दिल्ली-6 ।
9. हकीम एम० मुलतान एहमद रिजवी, **सदस्य**  
रामपुर (उ० प्र०) ।
10. डा० बी० नारायणास्वामी, **सदस्य**  
70-नाना स्ट्रीट, वेपरी, मद्रास-7 ।
11. डा० एम० ए० एन० अयंगर, **सदस्य-सचिव**  
संयुक्त निदेशक (स्वास्थ्य) ।
- 2 संकल्प की अन्य विषय-वस्तु में कोई परिवर्तन नहीं हुआ है ।

**आदेश**

आदेश दिया जाता है कि इस संकल्प की एक प्रति सब सम्बन्धित व्यक्तियों को भेज दी जाय ।

यह भी आदेश दिया जाता है कि सर्वसाधारण की सूचना के लिए अधिसूचना को भारत सरकार के राजपत्र में प्रकाशित किया जाय ।

जी० आर० कामत, सचिव

**वाणिज्य मंत्रालय**

नई दिल्ली, दिनांक 22 जनवरी 1966

**संकल्प**

सं० 26(1)-टैरि/63—टैरिफ आयोग की कार्य प्रणाली का पुनरीक्षण करने के लिये एक जाच समिति बनाने के प्रश्न पर भारत सरकार कुछ समय से विचार कर रही थी । इसी के अनुसार भारत सरकार ने यह पुनरीक्षण करके इस विषय में अपनी सिफारिशें सरकार के समक्ष प्रस्तुत करने के लिये नीचे लिखे व्यक्तियों की एक समिति बनाने का निश्चय किया है :—

1. डा० बी० के० आर० वी० राव, **अध्यक्ष**  
सदस्य  
योजना आयोग ।
2. श्री एम० पी० पाई, **सदस्य**  
अध्यक्ष,  
टैरिफ आयोग, बम्बई ।
3. डा० डी० के० रंगनेकर, **सदस्य**  
विशेष प्रतिनिधि, इकानामिक  
टाइम्स, नई दिल्ली ।
4. श्री एच० एन० रे, **सदस्य**  
अतिरिक्त सचिव, वित्त मन्त्रालय,  
नई दिल्ली ।
5. श्री पी० के० जे० मेनन, **सदस्य-सचिव**  
संयुक्त सचिव, वाणिज्य मन्त्रालय,  
नई दिल्ली ।

समिति के विचारणीय विषय नीचे लिखे अनुसार होंगे :—

- (क) टैरिफ आयोग की कार्य प्रणाली का 1952 में उसका आरम्भ होने से लेकर अब तक का पुनरीक्षण करना ।
- (ख) सुधार करने की दृष्टि से वर्तमान अधिनियम में संशोधनों के सुझाव देना ।
- (ग) आयात के वर्तमान प्रतिबन्धों को ध्यान में रखते हुए उद्योगों के संरक्षण नीति का पुनरीक्षण करना ।

(घ) आंच करके यह सुझाव देना कि देश में विकसनीय आयोजन की आवश्यकताओं को ध्यान में रखते हुए टैरिफ आयोग को कौनसे अन्य कार्य सौंपे जा सकते हैं, और आयोग के संविधान तथा कार्यों में परिवर्तन करने की सिफारिश करना ।

समिति से 6 महीने के अन्दर अपना प्रतिवेदन प्रस्तुत कर देने की अपेक्षा की जाती है ।

**आदेश**

आदेश दिया जाता है कि इस संकल्प को सामान्य सूचना के लिये भारत के राजपत्र में प्रकाशित कर दिया जाय और इसकी एक-एक प्रति सभी सम्बन्धों को भेज दी जाय ।

एम० बनर्जी, उप-सचिव

नई दिल्ली, दिनांक 22 जनवरी 1966

**संकल्प**

सं० 3(1)/65-बी० ओ० टी०—भारत सरकार, वाणिज्य मन्त्रालय के संकल्प सं० 3(1)/64-बी० ओ० टी०, दिनांक 6 जुलाई 1964 जैसा कि वह संकल्प सं० 3(1)/64-बी० ओ० टी०, दिनांक 7 अगस्त 1964, 19 अक्तूबर 1964 और 9 अप्रैल 1965 द्वारा संशोधित किया जा चुका है, में आंशिक हेरफेर करने हुए भारत सरकार ने व्यापार बोर्ड के सदस्यों की अधिकतम संख्या को 26 से बढ़ाकर 27 कर देने का निश्चय किया है ।

**आदेश**

आदेश दिया जाता है कि इस संकल्प की एक-एक प्रति व्यापार बोर्ड के अध्यक्ष, उपाध्यक्ष, सदस्यों, राष्ट्रपति के निजी तथा सैनिक सचिवों, प्रधान मंत्री के सचिवालय, योजना आयोग, भारत सरकार के समस्त मन्त्रालयों और भारत की समस्त राज्य सरकारों को भेज दी जाय ।

2. यह भी आदेश दिया गया कि सामान्य सूचना के लिये प्रस्ताव को भारत के राजपत्र में प्रकाशित कर दिया जाय ।

डी० एम० जंगी, सचिव

**इस्पात और खान मंत्रालय****(खान और खान विभाग)**

नई दिल्ली, दिनांक 20 जनवरी 1966

**संकल्प**

सं० 27(1) 64 खान-4—निश्चय किया गया है कि प्रादेशिक खनिज परामर्श समितियों का तुरन्त अन्त कर दिया जाय जो गत खान तथा ईंधन विभाग (इस्पात खान तथा ईंधन मंत्रालय) संकल्प सं० 28(1)/57 खान-4 दिनांक 12 दिसम्बर 1959 के अंतर्गत स्थापित की गई थी । आदेश है कि संकल्प को सामान्य सूचना के लिये भारत के राजपत्र में प्रकाशित किया जाय ।

सी० एम० वेनूगोपाल राव, उप-सचिव

**साध और कृषि मंत्रालय****(कृषि विभाग)**

नई दिल्ली, दिनांक 19 जनवरी 1966

**प्रस्ताव**

सं० 13-45/65-एल० डी०—भारत सरकार ने निर्णय किया है कि डा० एम० एम० स्वामीनाथन जो भारतीय कृषि अनुसंधान संस्थान, नई दिल्ली में वनस्पति-विज्ञान प्रभाग के मुख्य हैं, इस मन्त्रालय के प्रस्ताव संख्या 13-49/64-एल० डी० दिनांक 23 मार्च 1965 के अंतर्गत बनाए गए पशु-पालन सम्बन्धी वैज्ञानिकों के पैनल के सदस्य होंगे ।



**आदेश**

आदेश दिया जाता है कि प्रस्ताव की एक प्रति भारत सरकार के समस्त मन्त्रालयों तथा विभागों, समस्त राज्य सरकारों तथा संघ क्षेत्रों, योजना आयोग, मन्त्रिमण्डल सचिवालय, लोक-सभा सचिवालय, राज्य सभा सचिवालय, भारत के नियन्त्रक तथा महालेखा परीक्षक, संसद् पुस्तकालय (5 प्रतियाँ), पशुपालन वैज्ञानिकों के पैनल के समस्त सदस्य, समस्त राज्य तथा संघ क्षेत्रों के कृषि तथा पशुपालन निदेशकों, खाद्य और कृषि मन्त्रालय (कृषि विभाग) के अन्तर्गत समस्त सम्बन्धित तथा अधीनस्थ कार्यालयों को भेजी जानी है।

यह भी आदेश दिया जाता है कि प्रस्ताव को सर्व-साधारण की जानकारी के लिये भारत के गजट में प्रकाशित किया जाये।

बी० सिद्धारमन, सचिव

**शिक्षा मन्त्रालय**

नई दिल्ली, दिनांक 19 जनवरी 1966

सं० एफ० 1-2/65-पी०ई० 2—शिक्षा मन्त्रालय की सम-संख्यक दिनांक 29 दिसम्बर, 1965 की अधिसूचना के क्रम में,

श्री शिव कुमार लाल,  
अतिरिक्त पुलिस महानिरीक्षक,  
आंध्र प्रदेश,  
हैबराबाद

को आज की तारीख से 15 जुलाई 1957 तक अखिल भारतीय खेल परिषद के एक सदस्य के रूप में नामजद किया जाता है।

रोशन लाल आनन्द, अवर सचिव

**रेल मन्त्रालय**

(रेलवे बोर्ड)

**नियम**

नई दिल्ली, दिनांक 5 फरवरी 1966

सं० ई० (जी० आर०)-I 65 आर० आर० 2-1—निम्न-लिखित सेवाओं में रिक्त स्थानों को भरने के लिए, संघ लोक सेवा आयोग द्वारा अगस्त/सितम्बर, 1966 में ली जाने वाली प्रतियोगिता परीक्षाओं के नियम सम्बन्धित मन्त्रालयों/विभागों की सहमति से आम जानकारी के लिए प्रकाशित किए जाते हैं।

- (i) इंजीनियरों की भारतीय रेल सेवा;
- (ii) भारतीय रेलों की प्रवर राजस्व सिव्वन्दी का बिजली-इंजीनियरिंग विभाग;
- (iii) भारतीय रेलों की प्रवर राजस्व सिव्वन्दी का सिगनल इंजीनियरिंग विभाग;
- (iv) भारतीय रेलों की उच्च राजस्व सिव्वन्दी का यांत्रिक इंजीनियरिंग और परिवहन (इंजन-शक्ति) विभाग;
- (v) केन्द्रीय इंजीनियरिंग सेवा, श्रेणी I
- (vi) केन्द्रीय इंजीनियरिंग सेवा, श्रेणी II
- (vii) केन्द्रीय बिजली इंजीनियरिंग सेवा, श्रेणी I
- (viii) केन्द्रीय बिजली इंजीनियरिंग सेवा, श्रेणी II
- (ix) भारतीय निरीक्षण सेवा, श्रेणी I (इंजीनियरिंग शाखा);
- (x) भारतीय पूर्ति सेवा, श्रेणी I
- (xi) सैनिक इंजीनियर सेवाएं, श्रेणी I (इमारत और सड़क संवर्ग);
- (xii) सैनिक इंजीनियर सेवाएं, श्रेणी I (बिजली और यांत्रिक संवर्ग);

- (xiii) भारतीय आर्डनेंस फैक्ट्री सेवा, श्रेणी I
- (xiv) टेलिग्राफ इंजीनियरिंग सेवा, श्रेणी I
- (xv) केन्द्रीय इंजीनियरिंग सेवा (सड़क) श्रेणी I
- (xvi) केन्द्रीय जल इंजीनियरिंग (श्रेणी I) सेवा; और
- (xvii) केन्द्रीय बिजली इंजीनियरिंग (श्रेणी I) सेवा।

2. परीक्षा में प्रवेश पाने के लिए उम्मीदवार के लिए आवश्यक होगा कि वह उस तारीख से पहले, ऐसे ढंग से और ऐसे फार्म पर आवेदन करे जो आयोग ने निर्धारित किए हों।

3. उम्मीदवार के लिए आवश्यक होगा कि वह या तो :—

- (क) भारत का नागरिक हो, या
- (ख) सिक्किम की प्रजा हो, या
- (ग) नेपाल की प्रजा हो, या
- (घ) भूटान की प्रजा हो, या
- (ङ) निव्वती शरणार्थी हो, जो भारत में स्थायी रूप से बसने के इरादे से, पहली जनवरी, 1962 से पहले भारत आया हो, या
- (च) वह व्यक्ति मूलतः भारतीय हो और भारत में स्थायी रूप से बसने के इरादे से पाकिस्तान से प्रव्रजन करके आया हो;

परन्तु उपर्युक्त वर्ग (ग), (घ), (ङ) या वर्ग (च) का उम्मीदवार वह व्यक्ति होगा जिसे सरकार द्वारा पात्रता-प्रमाण पत्र दिया गया हो और यदि वह वर्ग (च) का उम्मीदवार है, तो उसका पात्रता-प्रमाण पत्र उसकी नियुक्ति की तारीख से केवल एक वर्ष के लिए विधि मान्य होगा। इस अवधि के बाद उम्मीदवार को भारतीय नागरिकता अर्जन करने पर ही नौकरी में बनाए रखा जाएगा।

लेकिन जो उम्मीदवार निम्नलिखित में से किसी वर्ग के हों, उनके मामले में पात्रता-प्रमाण पत्र की आवश्यकता नहीं होगी:—

- (i) वे व्यक्ति, जो 19 जुलाई, 1948 से पहले पाकिस्तान से प्रव्रजन करके भारत आ गए हों और तब से साधारणतः भारत में रह रहे हों;
- (ii) वे व्यक्ति, जो 19 जुलाई, 1948 को या उसके बाद पाकिस्तान से प्रव्रजन करके भारत आ गए हों और जिन्होंने संविधान के अनुच्छेद 6 के अधीन अपने को भारतीय नागरिक के रूप में रजिस्टर करा लिया हो।
- (iii) उपर्युक्त वर्ग (च) के नागरिकेतर व्यक्ति जो संविधान लागू होने, अर्थात्, 26 जनवरी, 1950, से पहले भारत सरकार के अधीन सेवा में आ गए हों और तब से बिना व्यवधान के इस सेवा में चले आ रहे हों। लेकिन यदि ऐसा कोई व्यक्ति 26 जनवरी, 1950 के बाद सेवा-व्यवधान के पश्चात् फिर सेवा में आया हो या आए तो उसके लिए यथारीति पात्रता-प्रमाण पत्र देना आवश्यक होगा।

जिम उम्मीदवार के मामले में पात्रता-प्रमाण पत्र की आवश्यकता पड़े, उसे परीक्षा में बैठने दिया जा सकता है और अनन्तिम रूप में उसकी नियुक्ति भी की जा सकती है, बशर्त कि सरकार से उसे इसके लिए आवश्यक प्रमाण-पत्र दिया हो।

4(क) कोई पुरुष उम्मीदवार जिसकी एक से अधिक जीवित पत्नियां हों, या जो एक भार्या के रहते, किसी ऐसी हालत में विवाह करता है जिसमें कि वह विवाह ऐसी भार्या के जीवनकाल में होने के कारण शून्य है, ऐसी किसी नौकरी में, जिसमें कि इस प्रतियोगिता परीक्षा के परिणामस्वरूप नियुक्तियां की जाती हैं, नियुक्ति के लिए तब तक पात्र नहीं होगा, जब तक कि भारत सरकार इस बात से सन्तुष्ट होकर कि उस पुरुष उम्मीदवार के ऐसा करने के विशेष कारण हैं, उसे इस नियम से मुक्त न कर दे।

(ख) कोई महिला उम्मीदवार, जिसका विवाह इस कारण शून्य है कि उसके पति की ऐसे विवाह के समय, एक पत्नी जीवित थी, या उसने ऐसे आदमी से विवाह किया है जिसके, ऐसे विवाह के समय कोई जीवित पत्नी हो, ऐसी किसी नौकरी में, जिसमें कि इस प्रतियोगिता परीक्षा के परिणामस्वरूप नियुक्तियाँ की जाती हैं, नियुक्ति के लिए तब तक पात्र नहीं होगी, जब तक कि भारत सरकार इस बात से सन्तुष्ट होकर कि उस महिला उम्मीदवार के ऐसा करने के विशेष कारण हैं, उसे इस नियम से मुक्त न कर दे।

5(क) इस परीक्षा के उम्मीदवार के लिए यह आवश्यक है कि उसकी आयु 1 अगस्त, 1966 को 20 वर्ष हो चुकी हो लेकिन 25 वर्ष न हुई हो; अर्थात् वह 2 अगस्त, 1941 से पहले और 1 अगस्त, 1946 के बाद पैदा न हुआ हो।

(ख) यदि निम्नलिखित वर्गों के सरकारी कर्मचारी टेल्मी-ग्राफ इंजीनियरिंग सेवा, श्रेणी I भारतीय आइर्नसे फैंक्ट्री सेवा, श्रेणी I और केन्द्रीय इंजीनियरिंग सेवा (सड़क), श्रेणी I से भ्रष्ट सेवाओं के लिए आवेदन करते हैं और यदि वे नीचे कालम 1 में उल्लिखित प्राधिकारियों में से किसी एक के नियंत्रणाधीन विभाग/कार्यालय में नियुक्त हैं और कालम 2 में उल्लिखित तदनुसूची सेवा के लिए परीक्षा में प्रवेश चाहते हैं, तो उनके मामले में 25 वर्ष की अधिकतम आयु सीमा में छूट देकर उसे 30 वर्ष तक किया जा सकेगा।

- (i) वह उम्मीदवार जो सम्बन्धित विभाग/कार्यालय विशेष में मूल रूप से किसी स्थायी पद पर हो। यह छूट किसी ऐसे परिवीक्षाधीन व्यक्ति को नहीं मिलेगी, जो अपने परिवीक्षा काल में उस विभाग/कार्यालय में किसी स्थायी पद पर नियुक्त किया गया हो।
- (ii) वह उम्मीदवार जो 1 अगस्त, 1966 को किसी विभाग/कार्यालय विशेष में कम से कम 3 वर्ष तक लगातार अस्थायी सेवा में रहा हो।
- (iii) भारतीय रेलों के सिविल, बिजली, सिगनल और यांत्रिक और परिवहन (इंजन-शक्ति) विभागों में आयोग के माध्यम से भर्ती अस्थायी सहायक इंजीनियर भी यह रियायत पाने का पात्र होगा, चाहे विभाग में उसकी सेवा-अवधि कितनी ही हो।

कालम 1	कालम 2
रेल विभाग	भा० रे०इं०से० बि०इं०वि० सि०इं०वि० यां०इं० और पा० (इं०श०) विभाग
केन्द्रीय लोक निर्माण विभाग	के०इं०से०, श्रेणी I के०इं०से०, श्रेणी II के०बि०इं०से०, श्रेणी I के०बि०इं०से०, श्रेणी II
पुर्ति और निपटान महानिदेशालय	भा०पू०से०, श्रेणी I भा०नि०से०, श्रेणी II
इंजीनियर-इन-चीफ सेना मुख्यालय	सै०इं०से०, श्रेणी (इमारत और सड़क संवर्ग) सै०इं०से०, श्रेणी I (बि० और यां० संवर्ग)
केन्द्रीय जल और बिजली आयोग	के०ज०इं० (श्रेणी I) सेवा के०बि०इं० (श्रेणी I) सेवा

टिप्पणी—यदि अप्रेंटिसी काल के ठीक बाद रेलों पर किसी कार्य-पद पर नियुक्ति हो तो आयु सम्बन्धी रियायत के प्रयोजन के लिए अप्रेंटिस काल को रेल-सेवा माना जा सकता है।

(ग) यदि निम्नलिखित व्यक्ति टेल्मीग्राफ इंजीनियरिंग सेवा, श्रेणी-I के उम्मीदवार हों तो उनके सम्बन्ध में भी 25 वर्ष की अधिकतम आयु-सीमा को छूट देकर 30 वर्ष किया जा सकेगा।

- (i) वह उम्मीदवार जो डाक और तार विभाग में मूल रूप से किसी स्थायी पद पर हो। यह छूट किसी ऐसे परिवीक्षाधीन व्यक्ति को नहीं मिलेगी, जो अपने परिवीक्षा काल में उस विभाग में किसी स्थायी पद पर नियुक्त किया गया हो।
- (ii) वह उम्मीदवार जो डाक और तार विभाग के अधीन निम्नलिखित अस्थायी पदों में से किसी एक पर 1 अगस्त 1966 को लगाना कम से कम दो वर्ष रह चुका हो।

1. रिपीटर स्टेशन सहायक।
2. टेल्मीग्राफ कारखानों के फोरमैन या सहायक फोरमैन।
3. कारखानों के स्थायी सहायक इंजीनियर।
4. इंजीनियरिंग पर्यवेक्षक।
5. कारखाना पर्यवेक्षक।

(घ) इसी तरह भारतीय आइर्नसे फैंक्ट्री सेवा, श्रेणी-I के उन उम्मीदवारों के लिए भी, जो आइर्नसे फैंक्ट्रियों में मूल रूप से स्थायी नियुक्तियों पर हों, 25 वर्ष की अधिकतम आयु सीमा को छूट देकर 30 वर्ष किया जा सकेगा। यह छूट आइर्नसे फैंक्ट्रियों में नियुक्त किसी ऐसे परिवीक्षाधीन व्यक्ति को नहीं मिलेगी जो अपने परिवीक्षा काल में किसी स्थायी पद पर नियुक्त किया गया हो।

परन्तु किसी भी उम्मीदवार को उपर्युक्त (ख), (ग) और (घ) में उल्लिखित अधिकतम आयु सीमा की छूट के अन्तर्गत, परीक्षा में तीन बार से अधिक बैठने की अनुमति नहीं दी जायेगी।

(ङ) ऊपर निर्धारित अधिकतम आयु-सीमा में निम्नलिखित रूप से और छूट दी जा सकेगी:—

- (i) यदि उम्मीदवार अनुसूचित जाति या अनुसूचित आदिम जाति का हो तो अधिक से अधिक पांच वर्ष तक;
- (ii) यदि उम्मीदवार पूर्वी पाकिस्तान से आया हुआ सदाशयी विस्थापित व्यक्ति हो और 1 जनवरी 1964 को या उसके बाद प्रजनन करके भारत आया हो तो अधिक से अधिक तीन वर्ष तक;
- (iii) यदि उम्मीदवार अनुसूचित जाति या अनुसूचित आदिम जाति का हो और साथ ही पूर्वी पाकिस्तान से आया हुआ सदाशयी विस्थापित व्यक्ति हो और 1 जनवरी 1964 को या उसके बाद प्रजनन करके भारत आया हो, तो अधिक से अधिक आठ वर्ष तक;
- (iv) यदि उम्मीदवार पांडिचेरी के संघक्षेत्र का निवासी हो और उसने किसी भी समय में फ्रेंच भाषा के माध्यम से शिक्षा पायी हो, तो अधिक से अधिक तीन वर्ष तक;
- (v) यदि उम्मीदवार भारतीय नागरिक हो और श्रीलंका से प्रत्यावर्तित हो, तो अधिक से अधिक तीन वर्ष तक;
- (vi) यदि उम्मीदवार गोआ, दमन और दिव के संघक्षेत्र का निवासी हो तो अधिक से अधिक तीन वर्ष तक; और
- (vii) यदि उम्मीदवार मूलतः भारतीय हो और केन्या, उगान्दा और तंजानिया के संयुक्त गणराज्य (भूतपूर्व तांगानिका और जंजोबार) से प्रजनन करके भारत आया हो, तो अधिक से अधिक तीन वर्ष तक।

ध्यान दीजिए: (i) यदि उम्मीदवार किसी एक या अधिक सेवाओं/पदों के लिए परीक्षा में बैठना है, तो इस नियम के प्रयोजनों के लिए ऐसा समझा जाएगा कि वह सामान्यतः ऐसी परीक्षा के अन्तर्गत आने वाली सभी सेवाओं/पदों के लिए एक बार परीक्षा में बैठ चुका है।

यदि उम्मीदवार किसी एक या अधिक विषयों में वस्तुतः परीक्षा देता है तो ऐसा समझा जाएगा कि वह परीक्षा में बैठ चुका है।

ध्यान दीजिए: (ii) उपर्युक्त नियम 5(ख), 5(ग) और 5(घ) में उल्लिखित आयु की गिन्यायत के अन्तर्गत परीक्षा में प्रवेश पाने वाला व्यक्ति, यदि अपना आवेदन पत्र देने के बाद, परीक्षा देने से पहले या बाद में नौकरी से इस्तीफा दे दे या उसके विभाग/कार्यालय द्वारा उसकी सेवाएं समाप्त कर दी जाएं, तो ऐसे व्यक्ति की उम्मीदवारी समाप्त की जा सकती है। लेकिन यदि आवेदन-पत्र देने के बाद, उस व्यक्ति की नौकरी या पद से छटनी कर दी जाए तो वह परीक्षा का पात्र बना रहेगा।

यदि कोई उम्मीदवार, अपने विभाग को प्रार्थना पत्र देने के बाद, अन्य विभाग/कार्यालय को स्थानान्तरित कर दिया जाता है, तो वह आयु सम्बन्धी विभागी गिन्यायतों के अन्तर्गत उस नौकरी के लिए प्रतियोगिता में भाग लेने का पात्र होगा, जिसके लिए वह स्थानान्तरण न होने की हालत में पात्र होता, लेकिन शर्त यह है कि उसका प्रार्थना पत्र उसके मूल विभाग द्वारा अप्रेषित किया गया हो।

उपर्युक्त उपबन्धों के अतिरिक्त किसी भी हालत में निर्धारित आयु सीमा में छूट नहीं दी जाएगी।

6. यदि कोई उम्मीदवार पहले से चाहे स्थायी या अस्थायी रूप में, सरकारी नौकरी में हो, तो परीक्षा से पहले उसके लिए आवश्यक है कि वह परीक्षा में बैठने के लिए अपने विभाग के अध्यक्ष से पूर्वानुमति प्राप्त करे।

7. उम्मीदवार के लिए आवश्यक है कि:—

(क) उसने केन्द्रीय या राज्य विधान सभा के किसी अधिनियम द्वारा भारत में निगमित विश्वविद्यालय, या संसद के किसी अधिनियम द्वारा स्थापित या विश्वविद्यालय अनुदान आयोग अधिनियम, 1956 की धारा 3 के अन्तर्गत विश्वविद्यालयों की तरह मान्य घोषित किसी अन्य शिक्षा संस्था से इंजीनियरिंग की उपाधि प्राप्त की हो; अथवा

(ख) उसने इंजीनियरों की संस्था (भारत) की सम्बद्ध सदस्यता (एसीशिएट मेम्बरशिप) परीक्षा के 'ए' और 'बी' खण्डों को पास किया हो या उस संस्था द्वारा मान्य कोई अन्य शिक्षा सम्बन्धी अर्हता प्राप्त की हो, जिससे उसे इन खण्डों को पास करने से मुक्त कर दिया गया हो; अथवा

(ग) उसने परिशिष्ट-I में निर्धारित शर्तों के अधीन और उस परिशिष्ट में उल्लिखित विश्वविद्यालयों में से किसी एक से इंजीनियरिंग की उपाधि प्राप्त की हो; अथवा

(घ) उसने लोबरो कालेज, लीसेस्टरशायर की सिविल, यांत्रिक या बिजली इंजीनियरिंग में आनर्स डिप्लोमा परीक्षा पास की हो, लेकिन शर्त यह है कि उम्मीदवार सामान्य प्रारम्भिक परीक्षा पास कर चुका हो या उससे मुक्त कर दिया गया हो अथवा

(ङ) उसने दूर संचार इंजीनियरों की संस्था (भारत) की स्नातक सदस्यता परीक्षा पास की हो; अथवा

(च) उसने नवम्बर, 1959 के बाद होने वाली, एलेक्ट्रानिक्स और रेडियो इंजीनियरों की संस्था, लन्दन से स्नातक सदस्यता परीक्षा पास की हो।

एलेक्ट्रानिक्स और रेडियो इंजीनियरों की संस्था, लन्दन की नवम्बर, 1959 से पहले हुई स्नातक सदस्यता परीक्षा भी निम्न शर्तों के साथ स्वीकार्य होगी:—

(1) नवम्बर, 1959 से पहले हुई परीक्षा पास करने वाले उम्मीदवारों ने निम्नलिखित अतिरिक्त विषयों में परीक्षा दी और पास की हो:—

(i) बिजली इंजीनियरिंग के सिद्धान्त और व्यवहार (1959 के बाद की योजना के खण्ड 'ए' में निर्धारित पाठ्यक्रम के अनुसार)।

(ii) गणित (1959 के बाद की योजना के खण्ड 'बी' में निर्धारित पाठ्यक्रम के अनुसार)।

(2) सम्बन्धित उम्मीदवार उपर्युक्त (1) में निर्धारित शर्तें पूरी करता है, इसके प्रमाणस्वरूप उसे एलेक्ट्रानिक्स और रेडियो इंजीनियरों की संस्था, लन्दन का प्रमाण-पत्र पेश करना चाहिए।

टिप्पणी 1—अर्हता (छ) और (च) केवल उन्हीं उम्मीदवारों पर लागू होगी जो प्रतियोगिता में भारतीय रेलों की प्रवर राजस्व सिम्बन्धी के सिगनल इंजीनियरिंग विभाग, बिजली इंजीनियरिंग विभाग और यांत्रिक इंजीनियरिंग एवं परिवहन (इंजन-शक्ति) विभाग, टेलीग्राफ इंजीनियरिंग सेवा श्रेणी I, केन्द्रीय बिजली इंजीनियरिंग सेवाएं श्रेणी I और II, सैनिक इंजीनियर सेवाएं श्रेणी I (बिजली और यांत्रिक संवर्ग), केन्द्रीय जल इंजीनियरिंग (श्रेणी I) सेवा (यांत्रिक इंजीनियरिंग पद) और केन्द्रीय बिजली इंजीनियरिंग (श्रेणी I) सेवा के लिए भाग ले रहे हों।

टिप्पणी 2—आपवादिक मामलों में आयोग ऐसे उम्मीदवार को, जिसके पास इस नियम में निर्धारित कोई अर्हता न हो, शिक्षा की दृष्टि से अर्ह समझ सकता है, बशर्ते उसने ऐसी अन्य संस्थाओं द्वारा ली जाने वाली परीक्षाएं पास की हों जिनका स्तर आयोग की राय में परीक्षा में उसके प्रवेश को औचित्य प्रदान करने वाला हो।

टिप्पणी 3—कोई ऐसा उम्मीदवार जो किसी ऐसी परीक्षा में बैठ चुका है जिसे पास करने से वह इस परीक्षा में बैठने का पात्र बनता है लेकिन जिसके परीक्षा फल की सूचना उसे नहीं मिली है, इस परीक्षा में प्रवेश के लिए आवेदन-पत्र दे सकता है। यदि कोई उम्मीदवार किसी ऐसी अर्हक परीक्षा में बैठना चाहता है तो वह भी आवेदन-पत्र दे सकता है, लेकिन शर्त यह है कि अर्हक परीक्षा इस परीक्षा के प्रारम्भ होने से पहले समाप्त हो जाए। ऐसे उम्मीदवार को, यदि वह अन्यथा पात्र हो तो परीक्षा में प्रवेश मिल जाएगा, लेकिन उसके प्रवेश को अनन्तिम समझा जाएगा और यदि वह उस परीक्षा को पास करने का प्रमाण यथासम्भव और किसी भी हालत में इस परीक्षा के प्रारम्भ होने से दो महीने के भीतर पेश नहीं करता, तो उसके प्रवेश को रद्द कर दिया जाएगा।

टिप्पणी 4—वे उम्मीदवार जो अन्यथा अर्ह हों लेकिन जिन्होंने ऐसे विदेशी विश्वविद्यालयों से उपाधियां प्राप्त की हों, जो परिशिष्ट I में शामिल नहीं हैं, भी आयोग को आवेदन-पत्र भेज सकते हैं और आयोग के विवेक पर उन्हें परीक्षा में प्रवेश मिल सकता है।

8. परीक्षा से प्रवेश के लिए कोई उम्मीदवार पात्र है या नहीं, इस बारे में आयोग का निर्णय अन्तिम होगा।

जब तक किसी उम्मीदवार के पास आयोग से प्राप्त प्रवेश प्रमाण पत्र नहीं होगा तब तक उसे परीक्षा में नहीं बैठने दिया जाएगा ।

9. यदि आयोग द्वारा कोई उम्मीदवार प्रतिरूपण करने, या जाली दस्तावेज पेश करने, या दस्तावेजों में काट-छांट करने, या गलत या झूठे बयान देने, या महत्वपूर्ण सूचना दबा लेने, या परीक्षा में प्रवेश प्राप्त करने के लिए अन्य अनियमित या अनुचित साधनों का सहारा लेने, या परीक्षा भवन में गृहित साधनों का प्रयोग करने, या उनके प्रयोग की चेष्टा करने, या परीक्षा भवन में दुर्व्यवहार करने का दोषी हो या आयोग द्वारा दोषी घोषित किया गया हो, तो उसके विरुद्ध अदालती कार्रवाई के अलावा उसे निम्न सजा दी जा सकती है:—

(क) उसे स्थायी रूप से या विशिष्ट अवधि के लिए आयोग द्वारा,

(i) उम्मीदवारों का चयन करने के लिए आयोग की परीक्षा में प्रवेश या साक्षात्कार में उपस्थित होने से; और

(ii) सरकार द्वारा नौकरी से वारित किया जा सकता है ।

(ख) यदि वह पहले से ही सरकारी नौकरी में हो तो उपर्युक्त नियमों के अन्तर्गत उसके विरुद्ध अनुशासन की कार्रवाई की जा सकती है ।

10. किसी भी साधन से अपनी उम्मीदवारी का समर्थन पाने के लिए उम्मीदवार द्वारा की गयी कोई कोशिश उसे प्रवेश के लिए अनर्ह बना सकती है ।

11. इन नियमों के अन्तर्गत आयोग द्वारा परीक्षा इन नियमों के परिशिष्ट II में दिए गए विनियमों में निर्धारित ढंग से ली जाएगी ।

12. उम्मीदवारों के लिए आवश्यक है कि वे आयोग की सूचना के अनुबन्ध I में निर्धारित फीस दें । इस अनुबन्ध में उल्लिखित सीमा के बाहर फीस की वापसी के लिए न तो कोई दावा प्रहण किया जाएगा और न फीस को किसी अन्य परीक्षा या प्रकरण के लिए आरक्षित रखा जाएगा ।

13. अनुसूचित जातियों और अनुसूचित आदिम जातियों के उम्मीदवारों के लिए खाली जगहें उस सीमा तक आरक्षित रखी जाएंगी जो भारत सरकार नियत करे ।

अनुसूचित जातियों/आदिम जातियों से उन सभी जातियों/आदिम जातियों का अभिप्राय है जिनका अनुसूचित जाति/आदिम जाति सूची (आशोधन) आदेश, 1956 के साथ पड़े गए अनुसूचित जाति और अनुसूचित आदिम जाति आदेश (संशोधन) अधिनियम, 1956, संविधान (जम्मू और काश्मीर) अनुसूचित जाति आदेश, 1956, संविधान (अण्डमान और निकोबार द्वीप) अनुसूचित आदिम जाति आदेश, 1959, संविधान (दादरा और नागर हवेली) अनुसूचित जाति आदेश, 1962, संविधान (दादरा और नागर हवेली) अनुसूचित आदिम जाति आदेश, 1962 तथा संविधान (पांडिचेरी) अनुसूचित जाति आदेश, 1964 में उल्लेख किया गया है ।

14. वे उम्मीदवार जो लिखित परीक्षा में उतने न्यूनतम अर्हक अंक प्राप्त कर लेते हैं जितने कि आयोग ने अपने विवेक से नियत किए हों, आयोग द्वारा व्यक्तिशः परीक्षा के हेतु साक्षात्कार के लिए बुलाए जाएंगे ।

परीक्षा के बाद आयोग हर उम्मीदवार को अन्तिम रूप से दिए गए कुल अंकों के अनुसार योग्यता के आधार पर उम्मीदवारों

की सूची बनाएगा; और उसी क्रम से उन उम्मीदवारों की, जिन्हें आयोग परीक्षा द्वारा अर्ह समझे उतनी अनारक्षित खाली जगहों पर, नियुक्ति के लिए सिफारिश की जाएगी, जिनकी को परीक्षा के परिणाम पर भरने का निर्णय किया गया हो ।

परन्तु यदि अनुसूचित जाति या अनुसूचित आदिम जाति का कोई उम्मीदवार जो यथापि आयोग द्वारा निर्धारित स्तर से किसी भी सेवा के लिए अर्ह न हो, किन्तु उसके द्वारा, प्रशामन की कार्य-कुशलता को ध्यान में रखते हुए, नियुक्ति के लिए उपयुक्त घोषित किया गया हो, तो उसकी उस सेवा में, यथास्थिति अनुसूचित जातियों और अनुसूचित आदिम जातियों के सदस्यों के लिए आरक्षित जगहों पर, नियुक्ति के लिए सिफारिश की जाएगी ।

15. परीक्षा में सफल होने से नियुक्ति का अधिकार तब तक नहीं मिलता जब तक कि सरकार आवश्यक जांच-पड़ताल के बाद इस बारे में सन्तुष्ट न हो जाए कि उम्मीदवार सरकारी सेवा में नियुक्ति के लिए सर्वथा उपयुक्त है ।

आवेदन करते समय उम्मीदवार ने जिन सेवाओं को तुरज्जिह दी हो उनका यथोचित ध्यान रखा जाएगा, लेकिन भारत सरकार को यह अधिकार रहेगा कि वह उसे जिस सेवा/पद के लिए वह उम्मीदवार है, उसमें से कोई भी सेवा/पद दे सके ।

टिप्पणी—प्रत्येक उम्मीदवार को परीक्षा फल किस रूप में और किस ढंग से भेजा जाए, इस बात का निर्णय आयोग स्वविवेक से करेगा और परिणाम के सम्बन्ध में आयोग उम्मीदवार से कोई पत्र-व्यवहार नहीं करेगा ।

16. उम्मीदवार के लिए यह आवश्यक है कि वह मानसिक और शारीरिक दृष्टि से पूर्ण स्वस्थ हो और उसमें कोई ऐसी शारीरिक कमी न हो जिनके कारण सेवा में अधिकारी के नाते उसके कर्तव्यपालन में बाधा पड़ने की संभावना हो । जो उम्मीदवार (इस प्रकार की शारीरिक परीक्षा के बाद जैसी कि यथास्थिति सरकार या नियुक्ति करने वाले प्राधिकारी द्वारा, निर्धारित की जाए) इन आवश्यक बातों को पूरा नहीं करेगा, वह नियुक्त नहीं किया जाएगा । जो उम्मीदवार व्यक्तित्व परीक्षा के लिए अर्ह घोषित किए जाएंगे, उन सबकी शारीरिक परीक्षा उसी जगह ली जाएगी जहां उन्हें साक्षात्कार के लिए बुलाया जाएगा । शारीरिक परीक्षा साक्षात्कार के तुरन्त पहले या बाद में ली जाएगी । उम्मीदवारों की चिकित्सा मण्डल को 16 रु० फीस देनी होगी । किसी उम्मीदवार की शारीरिक परीक्षा लेने का अर्थ यह नहीं है कि उक्त उम्मीदवार नियुक्ति के लिए विचारणीय होगा ।

उम्मीदवारों को किसी प्रकार की निराशा न हो इसके लिए सलाह दी जाती है कि वे परीक्षा में प्रवेश के लिए आवेदन करने से पहले सिविल सर्जन स्तर के किसी सरकारी चिकित्सा अधिकारी से अपनी परीक्षा करा लें । नियुक्ति से पहले उम्मीदवारों की किस प्रकार की डाक्टरी परीक्षा होगी या उसमें उनसे किस स्तर की अपेक्षा की जाएगी इसके बारे में पूरा ब्योरा परिशिष्ट III में दिया गया है ।

पी० सी० मैथ्यू, सचिव

सिचार्ज व विजसो मंत्रालय

नई दिल्ली, दिनांक 29 दिसम्बर 1965

संकल्प

सं० वि० का० 5-503(6)/64—इस मंत्रालय के संकल्प संख्या वि० का० 5-503(6)/64, दिनांकित 27 अक्टूबर 1964, 12 जुलाई 1965 और 6 अक्टूबर 1965 के सातवें में, उत्तर विहार में अधिवासा नदियों (भागमति और कमला बालन के

बीच) में बाढ़ समस्या के आंकते और बाढ़ नियन्त्रण के लिये पर्याप्त योजनाएं बनाने के लिये स्थापित की गई तकनीकी समिति द्वारा अपनी अन्तिम रिपोर्ट देने की अवधि को 31 दिसम्बर 1965 तक और बढ़ा दिया जाता है।

#### आवेश

आदेश दिया जाता है कि इस संकल्प को बिहार सरकार, प्रधान मंत्री के सचिवालय, राष्ट्रपति के निजी तथा सैनिक सचिव,

भारत के नियंत्रक तथा महालेखा परीक्षक तथा योजना कर्मिणन को उनके सूचना के लिये भेज दिया जाए।

आदेश दिया जाता है कि इस संकल्प को भारत के राजपत्र में प्रकाशित कर दिया जाए और राजस्थान सरकार से प्रार्थना की जाए कि वे भी इसे साधारण सूचना के लिए राज्य के राजपत्र में प्रकाशित कर दें।

पी० आर० अहूजा, संयुक्त सचिव

#### PRESIDENT'S SECRETARIAT

New Delhi, the 26th January 1966

No. 3-Pres./66.—The President is pleased on the occasion of the seventeenth Republic Day, 1966, to award the President's Police and Fire Service Medal for distinguished service to the undermentioned officers :—

Shri Ghulam Hassan Peer,  
Superintendent of Police,  
Criminal Investigation Department,  
Special Branch,  
Jammu and Kashmir.

Shri Mohmed Quadir Ali, I.P.S.,  
Deputy Inspector General of Police,  
Central Range,  
Bangalore, Mysore.

Shri Gurbhagat Singh Gill, I.P.S.,  
Senior Superintendent of Police,  
Amritsar, Punjab.

Shri Prasad Kumar Basu, I.P.S.,  
Deputy Inspector General of Police,  
Intelligence Branch,  
West Bengal.

Shri Hem Bahadur Rai,  
Assistant Commandant (*Officiating*),  
Eastern Frontier Rifles,  
2nd Battalion, Salua,  
Midnapore, West Bengal.

Shri Ramanathapuram Subramania Iyer Krishnan,  
Central Intelligence Officer,  
Subsidiary Intelligence Bureau,  
Madras.

2. These awards are made under rule 4(ii) of the rules governing the grant of the President's Police and Fire Services Medal.

No. 4-Pres./66.—The President is pleased on the occasion of the seventeenth Republic Day, 1966, to award the Police Medal for meritorious service to the undermentioned officers :—

Shri Ramaswamy Venkatesan,  
Deputy Superintendent of Police,  
Anti-Corruption Bureau,  
Andhra Pradesh.

Shri Bongarala Revathi Rao,  
Deputy Superintendent of Police (*Officiating*),  
Narasaraopet, Guntur District,  
Andhra Pradesh.

Shri Anala Sreerama Rao,  
Deputy Superintendent of Police (*Temporary*),  
Andhra Pradesh.

Shri Komaragiri Venkat Jaipal Rao,  
Inspector of Police,  
Anti-Corruption Bureau, Khannaman,  
Andhra Pradesh.

Shri Mohammad Ali Ansari,  
Inspector of Police,  
Visakhapatnam South,  
Andhra Pradesh.

Shri Bommana Narayanaswamy,  
Inspector of Police (*Officiating*),  
Criminal Investigation Department,  
Crime Branch, Hyderabad,  
Andhra Pradesh.

Shri Mohammed Ali,  
Head Constable,  
Criminal Investigation Department,  
Special Branch, Hyderabad,  
Andhra Pradesh.

Shri Ghana Kanta Medhi, I.P.S.,  
Superintendent of Police,  
Special Branch, Shillong,  
Assam.

Shri Rajeshwar Lal, I.P.S.,  
Deputy Inspector General of Police,  
Bihar.

Shri Rameshwar Lal,  
Commandant,  
Bihar Military Police-V,  
Bihar.

Shri Awadesh Kumar Sinha,  
Deputy Superintendent of Police,  
Criminal Investigation Department,  
Special Branch, Patna,  
Bihar.

Shri Nandji Singh,  
Wing Commander,  
Bihar Military Police-II,  
Bihar.

Shri Dattarajirao Dagajirao Deore,  
Deputy Commandant,  
State Reserve Police Force, Group VI,  
Gujarat.

Shri Mangalbhai Sombhai Valand,  
Sub-Inspector of Police,  
Criminal Investigation Department  
Gujarat.

Shri Labhshanker Laluram Vyas,  
Sub-Inspector of Police (*Officiating*),  
Ahmedabad City,  
Gujarat.

Shri Padmakar Govind Karnik,  
Sub-Inspector of Police (*Officiating*),  
Ahmedabad City,  
Gujarat.

Shri Surendra Nath, I.P.S.,  
Deputy Inspector General of Police,  
Criminal Investigation Department,  
Jammu and Kashmir.

Shri Vishwa Mitra Bakhshi, I.P.S.,  
Deputy Inspector General of Police,  
Jammu Range,  
Jammu and Kashmir.

Shri Mohamad Sultan,  
Superintendent of Police,  
Jammu and Kashmir.

Shri Abdul Majid Lone,  
Deputy Superintendent of Police,  
Criminal Investigation Department,  
Jammu and Kashmir.

Shri Koratty Yoosuf Moidcenkutty,  
Sub-Inspector of Police,  
Criminal Investigation Department,  
Crime Branch,  
Kerala.

Shri Jagdish Chandra Dikshit, I.P.S.,  
Deputy Inspector General of Police,  
Crime and Railways, Bhopal,  
Madhya Pradesh.

Shri Danwarilal Shrivastava, Deputy Superintendent of Police, Bilaspur District, Madhya Pradesh.	Shri Suresh Gajanan Pendse, Sub-Inspector of Police, Selection Grade, Greater Bombay, Maharashtra.
Shri Baijnath Shivnath Mehta, City Superintendent of Police, Jabalpur, Madhya Pradesh.	Shri Appa Yeshwant Rawool, Head Constable, Greater Bombay, Maharashtra.
Shri Laxmi Prasad Shukul, Deputy Superintendent of Police, Chhatarpur, Madhya Pradesh.	Shri Vinayak Govind Deshmukh, Head Constable (Unarmed), Jalgaon District, Maharashtra.
Shri Benjamin Talim, Reserve Inspector of Police, Morena District, Madhya Pradesh.	Shri Kukke Subramanya Sastry Srikanta Sastry, Assistant Commissioner of Police Special Branch, Bangalore City, Mysore.
Shri Gunanand Sharma, Company Commander, 12th Battalion, Special Armed Force, Madhya Pradesh.	Shri Ramachander Dattatraya Jadhav, Inspector of Police, Mysore.
Shri Gauri Shankar, Head Constable No. 16, Chhatarpur District, Madhya Pradesh.	Shri Munisiddappa Hanumantha Setty, Inspector of Police, Mysore.
Shri Bhagwandas, Head Constable No. 441, Sagar District, Madhya Pradesh.	Shri Kanickaswamy, Assistant Sub-Inspector of Police, Armed Reserve, Mysore.
Shri Nireshwarya Rustum Suvarna, I.P.S., Superintendent of Police, Headquarters, Vigilance and Anti-Corruption, Madras.	Shri Binayak Mohapatra, Superintendent of Police ( <i>Officiating</i> ), Dhenkamal, Orissa.
Shri Kandamangala Sreeramchandra Chandrasekaran, Assistant Commissioner of Police ( <i>Officiating</i> ), Madras City.	Shri Narsingh Santra, Deputy Superintendent of Police, Vigilance, Orissa.
Shri Vellore Lakshmana Pillai Parthasarathy, Inspector of Police, Criminal Investigation Department, Special Branch, Madras.	Shri Gangadhar Sahu, Deputy Superintendent of Police, Vigilance, Orissa.
Shri Pathalai Pathalai, Inspector of Police, Directorate of Vigilance and Anti-Corruption, Madras.	Shri Vedula Suryanarayana, Inspector of Police, Vigilance, Orissa.
Shri Thimmappa Gounder Dorairaj, Inspector of Police ( <i>Officiating</i> ), Criminal Investigation Department, Crime Branch, Madras.	Shri Sashibhusan Mohanty, Inspector of Police ( <i>Officiating</i> ), Vigilance, Orissa.
Shri Nallasivam Pillai Ramaswamy, Sub-Inspector of Police ( <i>Officiating</i> ), Tirunelveli District, Madras.	Shri Padam Ajit Roshia, I.P.S., Senior Superintendent of Police, Ferozepur, Punjab.
Shri Modhakala Chinnaswamy Venugopal, Head Constable No. 190, Madras City.	Shri Gurpuran Singh, I.P.S., Commandant, Punjab Armed Police, Punjab.
Shri Devapriyam Samuel, Head Constable No. 465, Madurai Urban District, Madras.	Shri Des Raj Singh, Deputy Superintendent of Police ( <i>Officiating</i> ), Punjab.
Shri Murlidhar Ganesh Kulkarni, Deputy Superintendent of Police, Nasik District, Maharashtra.	Shri Om Dutt Joshi, Inspector of Police ( <i>Officiating</i> ), Punjab.
Shri Jayavant Vithal Pai, Inspector of Police, Greater Bombay, Maharashtra.	Shri Tej Singh, Commandant, VI Battalion, Rajasthan Armed Constabulary, Rajasthan.
Shri Nilkant Keshav Patil, Inspector of Police, Jalgaon City, Maharashtra.	Shri Lekh Ram, Deputy Superintendent of Police ( <i>Officiating</i> ), Rajasthan.
Shri Chidambar Lingo Patil, Sub-Inspector of Police, Selection Grade, Greater Bombay, Maharashtra.	Shri Jagdish Rai Chawla, Inspector of Police, Rajasthan.
	Shri Kesri Singh, Inspector of Police, Rajasthan.
	Shri Pitri Saran Raturi, I.P.S., Assistant to the Inspector General of Police, Uttar Pradesh.

Syed Akhtar Abbas, I.P.S.,  
Commandant, XI Battalion,  
Pradeshik Armed Constabulary and Training Centre,  
Uttar Pradesh.

Mirza Mohammad Ahsan,  
Deputy Superintendent of Police,  
Crime Branch, Criminal Investigation Department,  
Uttar Pradesh.

Shri Har Prasad Sharma,  
Deputy Superintendent of Police, Anti-Corruption,  
Criminal Investigation Department,  
Bareilly,  
Uttar Pradesh.

Shri Shri Pal Singh,  
Subedar Adjutant, III Battalion,  
Pradeshik Armed Constabulary,  
Lucknow,  
Uttar Pradesh.

Shri Fateh Bahadur Singh,  
Inspector of Police,  
Azamgarh,  
Uttar Pradesh.

Shri Bhamabrata Lahiri, I.P.S.,  
Deputy Commissioner of Police,  
Calcutta.

Shri Pijush Kanti Mazumdar,  
Deputy Superintendent of Police (*Officiating*),  
West Bengal Police Wireless,  
West Bengal.

Shri Deva Prosad Mukherji,  
Inspector of Police,  
Detective Department,  
Calcutta.

Shri Arthil Candoth Madhavan Nambiar, I.P.S.,  
Deputy Director,  
Subsidiary Intelligence Bureau,  
Madras.

Shri Phanindra Nath Banerjee, I.P.S.,  
Deputy Director,  
Subsidiary Intelligence Bureau,  
Calcutta.

Shri Lakshman Rao Adige, I.P.S.,  
Joint Deputy Director,  
Intelligence Bureau,  
New Delhi.

Shri Tharuvakar Nanjappa Munivenkatappa,  
Deputy Central Intelligence Officer,  
Bangalore.

Shri Basant Ram Bali,  
Assistant Central Intelligence Officer-I,  
Intelligence Bureau,  
New Delhi.

Shri Jot Ram,  
Deputy Superintendent of Police,  
Special Police Establishment, Fraud Squad-I,  
New Delhi.

Shri Gururao Subrao Kulkarni,  
Inspector of Police,  
Special Police Establishment,  
Bombay.

Shri Mittra Nand Chaturvedi, I.P.S.,  
Deputy Inspector General of Police,  
Central Reserve Police,  
New Delhi.

Shri Garjan Singh,  
Sub-Inspector of Police,  
Central Police Training College,  
Abu.

Shri Raman Bal Krishna Warriar,  
Commandant,  
Special Emergency Force and Joint Director,  
Security, Railway Board,  
Ministry of Railways,  
New Delhi.

Shri Gurdial Singh,  
Assistant Inspector General,  
Railway Protection Force; and  
Deputy Director, Security, Railway Board,  
Ministry of Railways,  
New Delhi.

Shri Chandroth Cheruvari Rugson,  
Security Officer, Eastern Railway,  
Calcutta.

Shri Birman Tamang,  
Head Rakshak No. 3682,  
Railway Protection Force,  
South-Eastern Railway,  
Calcutta.

2. These awards are made under rule 4(ii) of the rules governing the grant of the Police Medal.

No. 5-Pres./66.—The President is pleased to award the Police Medal for gallantry to the undermentioned officers of the Jammu and Kashmir Police :—

*Names of the Officers and Ranks*

Shri O. N. Dhar,  
Inspector of Police,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

Shri Bashir Ahmed,  
Police Constable No. 605,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

*Statement of services for which the decorations have been awarded.*

On the 9th August 1965, more than 100 armed Pakistani raiders had stealthily approached the outskirts of Srinagar with the object of attacking the Radio Station and other vital installations. On receipt of the information, a Platoon of Kashmir Armed Police was immediately rushed to the spot. Soon after the Police party reached the outskirts of the City, they were attacked by the infiltrators with automatic weapons. Although very much outnumbered, the small police party retaliated vigorously and eventually repulsed the well planned attack killing two of the raiders and wounding three.

During this encounter Shri O. N. Dhar and Shri Bashir Ahmed exhibited conspicuous gallantry and devotion to duty of high order in the performance of which they laid down their lives.

2. These awards are made for gallantry under rule 4(i) of the rules governing the award of the Police Medal and consequently carry with them the special allowance admissible under rule 5, with effect from the 9th August 1965.

No. 6-Pres./66.—The President is pleased to award the Police Medal for gallantry to the undermentioned officers of the Jammu and Kashmir Police :—

*Names of the Officers and Ranks*

Shri Ram Lal,  
Assistant Sub-Inspector of Police,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

Shri Bhola Singh,  
Head Constable No. 672,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

Shri Harbans Singh,  
Head Constable No. 679,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

Shri Makhan Lal,  
Head Constable No. 795,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

Shri Abdul Rashid,  
Police Constable No. 85,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

Shri Ghulam Hassan,  
Police Constable No. 795,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

Shri Abdul Rashid,  
Police Constable No. 468,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

Shri Mohammad Sidiq,  
Police Constable No. 386,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

Shri Mohammad Maqsood,  
Police Constable No. 373,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

Shri Chatru Ram,  
Police Constable No. 320,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

Shri Pritam Singh,  
Police Constable No. 720,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

Shri Ghulam Ahmed Zargar,  
Police Constable No. 640,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

Shri Gurdas Chand,  
Police Constable No. 509,  
Kashmir Armed Police,  
Jammu and Kashmir. (Deceased)

Shri Bansi Lal,  
Police Constable No. 504,  
Kashmir Armed Police,  
Jammu and Kashmir.

*Statement of services for which the decorations have been awarded.*

On the 9th August 1965, a Platoon of Kashmir Armed Police under the command of Assistant Sub-Inspector of Police Ram Lal was on guard duty at Bimma Bridge on the outskirts of Srinagar City. At about 1600 hours, a Company of Pakistani raiders, armed with automatic weapons attacked the police party. Although very much outnumbered and armed with only 303 rifles, the small Police party engaged the raiders with firm determination. As a result of heavy and concentrated attack, a number of policemen laid down their lives while defending their position. Undeterred by these casualties, the Platoon Commander continued to encourage his men in fighting off the numerically superior enemy. When the police party ran short of ammunition, the enemy managed to approach nearer and called on the police party to surrender. But Shri Ram Lal refused to surrender and charged the enemy with his bayonet till he was killed by a hand-grenade.

During this encounter, these 14 policemen exhibited conspicuous gallantry and devotion to duty in the performance of which 13 of them laid down their lives.

2. These awards are made for gallantry under rule 4(i) of the rules governing the award of the Police Medal and consequently carry with them the special allowance admissible under rule 5, with effect from the 9th August 1965.

No. 7-Pres./66.—The President is pleased to award the Police Medal for gallantry to the undermentioned officer or the Jammu and Kashmir Police :—

*Name of the Officer and Rank*

Shri Bhagat Satbrat,  
Sub-Inspector of Police,  
Jammu and Kashmir. (Deceased)

*Statement of services for which the decoration has been awarded.*

In August 1965, Pakistani raiders managed to enter the Police Station at Mandi in the garb of ordinary citizens. Shri Bhagat Satbrat who was the Station Officer of the Police Station, suspected the *bona fides* of the intruders and challenged them. At this, the raiders attacked the inmates of the Police Station. Shri Bhagat fought off the raiders with a shovel, the only weapon available to him, and killed one of them. Before the other raiders could capture him, he managed to escape. His action gave sufficient warning and much needed time to the other policemen to escape before the Police Station was over run by a large number of infiltrators. Shri Bhagat remained at Mandi and collected information about the infiltrators and passed it to the Civil and Army authorities. Subsequently in the process of collecting intelligence, Shri Bhagat was captured by the raiders and killed.

Thus Shri Bhagat Satbrat, exhibited conspicuous gallantry and devotion to duty in the performance of which he laid down his life.

2. This award is made for gallantry under rule 4(i) of the rules governing the award of the Police Medal and consequently carries with it the special allowance admissible under rule 5.

Y. D. GUNDEVIA, Secy. to the President.

## PLANNING COMMISSION

### PANEL ON AYURVEDA AND OTHER SYSTEMS OF MEDICINE

No. III H 6(11)/64.—In partial modification of Resolution No. Hi H 6(11)/64, dated the 4th May 1965, it is hereby notified that the following names may be added to the list of members of the Panel on Ayurveda and Other Systems of Medicine :—

#### Members

1. Col. B. I. Taneja, Director, Indian Council of Medical Research, New Delhi.
2. Dr. B. K. Anand, Professor, Physiology, All India Institute of Medical Sciences, New Delhi.
3. Dr. M. V. Ramanan, Senior Physician, Siddha, Institute for Ayurvedic Studies & Research, Jamnagar.
4. Dr. Aryanand, Principal, Ayurvedic College, Satna (Madhya Pradesh).
5. Kaviraj Radhey Lall Galyan, Ayurvedic Hospital, Ballimaran, Delhi.
6. Shri G. V. Puranik, Dhootapapeshwar, Panvel-Kolaba (Maharashtra).
7. Kaviraj Ashutosh Majumdar, 90/8, Connaught Circus, New Delhi.
8. Hakim Mahmood Ahmed Khan, 5133, Sharif Manzil, Ballimaran, Delhi-6.
9. Hakim S. Sultan Ahmed Rizvi, Rampur (U.P.).
10. Dr. V. Narayanaswami, 70 Tana Street, Vepery, Madras-7.

#### Member-Secretary

11. Dr. M. A. N. Iyengar, Jt. Director (Health).
2. The other contents of the Resolution will remain unaltered.

## ORDER

ORDERED that a copy of the Notification be communicated to the Members concerned.

ORDERED also that the Notification be published in the Gazette of India for general information.

G. R. KAMAT, Secy.

New Delhi, the 21st January 1966

No. F. 15/1/65-CDN.—Prof. N. V. Sovani, Gokhale Institute of Politics & Economics, Poona, has resigned his membership of the National Planning Council set up under Planning Commission Resolution No. F. 15/1/65-CDN, dated the 26th February 1965, as he is proceeding abroad on a U.N. assignment.

## ORDER

ORDERED that a copy of the Notification be communicated to all concerned and that it be published in the Gazette of India.

K. A. P. STEVENSON, Jt. Secy.

## RESOLUTION

New Delhi, the 25th January 1966

### PANEL ON LABOUR POLICY

No. L&E(L)11-1/66.—In partial modification of Resolution No. L&E(L)11-1/64 dated 30-1-1965, Shri P. C. Mathew, Secretary, Ministry of Labour and Employment, is appointed as a member of the Panel on Labour Policy *vice* Shri P. M. Menon, retired. Shri P. M. Menon now Director, I.L.O., (India Branch) will continue to be on the Panel.

M. BUTT, Jt. Secy.

## MINISTRY OF FINANCE

### (Department of Company Affairs and Insurance)

## ORDER

New Delhi-1, the 19th January 1966

No. 51/1/65-CLII.—In pursuance of sub-clause (ii) of clause (b) of Sub-Section (4) of Section 209 of the Companies Act, 1956 (1 of 1956), the Central Government hereby authorises, the under-mentioned Officers of the Government of India, in the Ministry of Finance, (Department of Company Affairs & Insurance) for the purposes of said Section 209.

1. Shri N. D. Bhatia,  
Deputy Director of Inspection,  
Kanpur.
2. Shri S. K. Das Gupta,  
Investigating Officer,  
Calcutta.

B. M. MITRA, Jt. Secy.



## MINISTRY OF COMMERCE

## RESOLUTION

*New Delhi, the 22nd January 1966*

No. 26(1)-Tar/63.—The question of constituting a Committee of Inquiry to review the working of the Tariff Commission, Bombay, has been engaging the attention of the Government of India for some time. The Government of India have accordingly decided to set up a Committee consisting of the following persons to conduct such a review and make recommendations to the Government on the subject :—

## Chairman

1. Dr. V. K. R. V. Rao,  
Member,  
Planning Commission.

## Members

2. Shri M. P. Pai,  
Chairman,  
Tariff Commission, Bombay.
3. Dr. D. K. Rangnekar,  
Special Representative,  
Economic Times, New Delhi.
4. Shri H. N. Ray,  
Additional Secretary,  
Ministry of Finance,  
New Delhi.

## Member-Secretary

5. Shri P. K. J. Menon,  
Joint Secretary,  
Ministry of Commerce,  
New Delhi.

The terms of reference of the Committee will be as follows :—

- (a) To review the working of the Tariff Commission since its inception in 1952.
- (b) To suggest amendments to the existing Act in order to effect improvements.
- (c) To review the policy of protection to industries taking into account the present restrictions on imports.
- (d) To examine and suggest what other functions can be entrusted to the Tariff Commission having regard to the requirements of development planning in the country and to recommend changes in the Constitution and functions of the Commission.

The Committee is expected to submit its report within six months.

## ORDER

ORDERED that the Resolution be published in the Gazette of India for general information and copy thereof communicated to all concerned.

S. BANERJEE, Dy. Secy.

## RESOLUTION

*New Delhi, the 22nd January 1966*

No. 3(1)/65-BOT.—In partial modification of the Government of India, Ministry of Commerce Resolution No. 3(1)/64-BOT, dated the 6th July 1964, as amended by Resolutions No. 3(1)/64-BOT, dated the 7th August 1964, the 19th October 1964, and the 9th April 1965, the Government have decided to increase the maximum number of members of the Board of Trade from 26 to 27.

## ORDER

ORDERED that a copy of the Resolution be communicated to the Chairman, Vice Chairman, Members of the Board of Trade, the Private & Military Secretaries to the President, The Prime Ministers' Secretariat, the Planning Commission all Ministries of the Government of India and the State Governments of India.

ORDERED also that the Resolution be published in the Gazette of India for general information.

D. S. JOSHI, Secy.

## RESOLUTION

*New Delhi, the 22nd January 1966*

No. 35(2)-Com(Genl)(FMC)/65.—The question of constituting a committee to review the working of the Forward Markets Commission, Bombay has been engaging the attention of the Government of India for sometime past. The Government of India have accordingly decided to set up a Committee consisting of the following persons to conduct such a review and to make recommendations to the Government on the subject.

## Chairman

1. Prof. M. L. Dantwalla,  
Chairman,  
Agricultural Prices Commission,  
Department of Agriculture,  
Ministry of Food & Agriculture.

## Members

2. Shri A. S. Naik, I.C.S.,  
Chairman,  
Forward Markets Commission,  
Bombay.
3. The Agricultural Marketing Adviser to the Government of India,  
Nagpur.
4. Shri R. Mahadevan,  
Deputy Financial Adviser,  
Ministry of Finance.
5. Shri P. K. J. Menon, Joint Secretary in the Ministry of Commerce will be the Member-Secretary.
6. The terms of reference to the Committee will be as follows :—
  - (a) to review the working of the FMC during the last 10 years, to find out the extent to which the Commission has been able to carry out the objectives as embodied in the Statement of Objects and Reasons of the Statute;
  - (b) to assess the role that the forward markets can play in future in the light of the changed economic conditions in the country;
  - (c) to suggest amendments to the existing Act in order to effect improvements;
  - (d) to examine and suggest what other functions can be entrusted to the FMC.
7. The Committee may meet at New Delhi or other important trade centres in the country.
8. The Committee will submit its report to the Government within six months.

## ORDER

ORDERED that the Resolution be published in the Gazette of India for general information.

M. L. GUPTA, Under Secy.

## MINISTRY OF STEEL AND MINES

(Department of Mines & Metals)

## RESOLUTION

*New Delhi, the 20th January 1966*

No. 27(1)/64-MIV.—It has been decided to abolish with immediate effect the Regional Mineral Advisory Councils set up in the late Department of Mines & Fuel (Ministry of Steel, Mines and Fuel) Resolution No. 28(1)/57-MIV, dated the 12th December 1959.

## ORDER

ORDERED that the Notification be published in the Gazette of India for general information.

C. S. VENUGOPALA RAO, Dy. Secy.

## MINISTRY OF HEALTH

## RESOLUTION

*New Delhi, the 20th January 1966*

No. F. 12-28/63-FP.II.—In partial modification of this Ministry's Resolution No. F. 12-28/63-FP.II, dated the 10th November 1965, regarding constitution etc. of the Family Planning Programme Evaluation and Planning Committee, it has now been decided that the Committee will submit their report by the 31st March 1966, instead of the 31st December 1965.

M. K. KUTTY, Dy. Secy.

## RESOLUTION

*New Delhi, the 20th January 1966*

No. F. 4-38/64-FP.II.—In partial modification of this Ministry's Resolution No. F. 4-38/64-FP.II, dated the 22nd October 1965, regarding Committee to study the question of legalisation of abortion in the country, the Government of India have decided that the Committee will now submit their report by the 30th June 1966, instead of the 31st December 1965.

BASHESHA NATH, Under Secy.

## RESOLUTION

*New Delhi, the 27th January 1966*

No. F. 12-53/65-FP.I.—In continuation of this Ministry's Resolution No. F. 12-52/59-FP dated the 28th February, 1962, the Government of India are pleased to reconstitute the

Demographic Advisory Committee which will now consist of the following :—

*Chairman*

- (1) Dr. V. K. R. V. Rao,  
Member, Planning Commission,  
Yojna Bhawan, New Delhi.

*Members*

- (2) Prof. P. C. Mahalanobis  
Hony. Statistical Adviser,  
Cabinet Secretariat, 8, K. G. Avenue,  
New Delhi.
- (3) Prof. D. R. Gadgil,  
Director,  
Gokhale Institute of Politics and Economics,  
Poona-4.
- (4) Dr. P. S. Lokanathan,  
Director General,  
National Council of Applied Economic Research,  
Indraprastha Estate, New Delhi.
- (5) Dr. S. Chandrasekhar, Director,  
Indian Institute of Population Studies,  
Gandhinagar, Madras-20.
- (6) Director,  
Central Statistical Organisation,  
Cabinet Secretariat, New Delhi.
- (7) The Registrar General,  
India, New Delhi.
- (8) The Director,  
Demographic Training and Research Centre,  
Chembur, Bombay.
- (9) The Commissioner, Family Planning,  
D.G.H.S., New Delhi.

*Member-Secretary*

- (10) Lt. Col. B. L. Raina,  
Director,  
Central Family Planning,  
New Delhi.

The members of the Committee may co-opt additional members for *ad-hoc* purposes. Members of the Advisory Committee shall hold office for a period of three years.

The members of the Advisory Committee will :—

- (i) advise on research and studies on inter-relationship between economic, social and population changes on the reproductive pattern, attitudes and motivation affecting the size of the family;
- (ii) advise on the programme of training and research keeping in view that such training and research will assist the Government to take action in the economic and social field and thereby facilitate a sound National programme of reconstruction;
- (iii) co-ordinate demographic research schemes receiving financial assistance from the Government of India;
- (iv) review progress made in the centres receiving financial assistance from the Ministry of Health; and
- (v) examine and make recommendations on proposals which may be received by the Ministry of Health for financial assistance for conducting demographic research.

Non-official members of the Advisory Committee shall be entitled to the grant of travelling and daily allowances for visiting the centres and for attending the meetings of the Committee as are admissible to an officer of the highest grade in Class I of Central services. Members of the Committee who are Government servants will draw travelling and daily allowances as admissible to them from the source from which they get their pay.

**ORDER**

ORDERED that a copy of the Resolution be communicated to all concerned.

ORDERED also that the Resolution be published in the Gazette of India for general information.

B. MUKERJEE, Secy.

**MINISTRY OF FOOD & AGRICULTURE**

(Department of Agriculture)

**RESOLUTION**

New Delhi, the 19th January 1966

No. 13-45/65-LD.—The Government of India have decided that Dr. M. S. Swaminathan, Head of the Division of Botany, Indian Agricultural Research Institute, New Delhi, will be a member of the Panel of Scientists on Animal Husbandry constituted under this Ministry's Resolution No. 13-49/64-LD, dated the 23rd March 1965.

**ORDER**

ORDERED that a copy of the Resolution be communicated to all the Ministries and Departments of the Government of India; all State Governments and Union Territories, Planning Commission, Cabinet Secretariat, Comptroller and Auditor General of India, Parliament Library (5 copies), all members of the Panel of Animal Husbandry Scientists, Directors of Agriculture and Animal Husbandry in all the States and Union Territories, all attached and subordinate offices under the Ministry of Food & Agriculture (Department of Agriculture).

ORDERED also that the Resolution be published in the Gazette of India, for general information.

B. SIVARAMAN, Secy.

**RESOLUTIONS**

New Delhi, the 25th January 1966

No. 12-7/65-MY.—The Government of India have decided to expand the function of the Board for Agricultural Machinery and Implements constituted under the Ministry of Food and Agriculture Resolution No. 21-1/63-MY dated the 24th July 1963, to enable it also to deal with the requirements of machinery needed for dairies, slaughter houses, fisheries, food processing, poultry, tubewell drilling etc. Accordingly, the constitution of the Board has been enlarged to include the following members also :—

1. Special Secretary and Secretary, Agricultural Production Board, Ministry of Food & Agriculture, Department of Agriculture, *(In place of Secretary, Ministry of Food & Agriculture, Department of Agriculture.)*
2. Joint Secretary, Department of Coordination, Ministry of Finance.
3. Joint Secretary, Department of Supply and Technical Development.
4. Inspector General of Forests, Ministry of Food & Agriculture.
5. Irrigation Adviser, Ministry of Food & Agriculture.
6. Fisheries Development Adviser, Ministry of Food & Agriculture, Department of Food.
7. Livestock Development Adviser, Ministry of Food & Agriculture.
8. Dairy Development Adviser, Ministry of Food & Agriculture.
9. Adviser, Industry and Minerals Division, Planning Commission.
10. Head of the Division of Agriculture Engineering, Indian Agricultural Research Institute, New Pusa, New Delhi.

2. Under the Heading 'Functions of the Board' the following may be added to the function (i) after "forestry tools etc." :—

and machinery required for Dairies, Slaughter Houses, Fisheries, Food Processing, Poultry, Tubewell drilling, etc.

No. 12-7/65-MY.—The Board for Agricultural Machinery and Implements, constituted under the Ministry of Food and Agriculture Resolution No. 21-1/63-MY dated the 24th July 1963 has set up a Standing Committee to keep under constant review all matters concerning the Board.

2. The Committee is constituted as under :—

1. Special Secretary and Secretary, Agricultural Production Board, Ministry of Food & Agriculture, Department of Agriculture, *Chairman*
2. Joint Secretary incharge of Machinery Section in the Department of Agriculture.
3. Joint Secretary in the Department of Food dealing with Food processing Schemes and Fisheries.
4. Additional Secretary, Department of Industry and Supply.
5. Joint Secretary in the Department of Supply and Technical Development.
6. Adviser, Industry and Minerals Division, Planning Commission.
7. Joint Secretary, Department of Co-ordination, Ministry of Finance.
8. Director, Agricultural Implements, Directorate of Extension.
9. One representative of the manufacturers of Agricultural Machinery and Implements.
10. One representative of the importers of Agricultural Machinery and Implements.

11. Any other member of the Board or Technical Expert may be invited to attend the meetings of the Committee by special invitation.

*Member-Secretary*

12. Dy. Secretary incharge of Machinery Section in the Department of Agriculture, Ministry of Food & Agriculture.

3. The Standing Committee will meet as often as necessary. Its conclusions would be followed up with the Departments/Ministries concerned for speedy and effective implementation. The conclusions of the Committee would also be reported to the Board for Agricultural Machinery and Implements from time to time.

S. K. DATTA, Special Secy.

## MINISTRY OF EDUCATION

*New Delhi, the 19th January 1966*

No. F. 1-2/65-PE.2.—In continuation of the Ministry of Education Notification of even number dated the 29th December 1965,

Shri Shiv Kumar Lal,  
Additional Inspector General of Police,  
Andhra Pradesh,  
Hyderabad,

is nominated as a member of the All India Council of Sports with immediate effect and up to the 15th July 1967.

R. L. ANAND, Under Secy.

## MINISTRY OF TRANSPORT

*(Transport Wing)*

### RESOLUTION

*New Delhi, the 21st January 1966*

No. 21-T(42)/64.—In supersession of this Ministry's Resolution No. 21-T(42)/64, dated the 14th September 1965, Shri Gian Singh has been appointed, with effect from the forenoon of the 7th December 1965, to work as Secretary of the Road Transport Taxation Enquiry Committee set up *vide* this Ministry's Resolution No. 21-T(42)/64, dated the 6th September 1965, in place of Shri A. S. Bhatnagar.

### ORDER

ORDERED that a copy of the Resolution be communicated to all concerned and that it be published in the Gazette of India for general information.

N. P. MATHUR, Jt. Secy.

## MINISTRY OF RAILWAYS

*(Railway Board)*

### RULES

*New Delhi, the 5th February 1966*

No. E(GR)165RR2-1.—The rules for a competitive examination to be held by the Union Public Service Commission in August/September 1966, for the purpose of filling vacancies in the following Services are, with the concurrence of the Ministry/Departments concerned, published for general information.

- (i) Indian Railway Service of Engineers;
- (ii) Electrical Engineering Department of the Superior Revenue Establishment of Indian Railways;
- (iii) Signal Engineering Department of the Superior Revenue Establishment of Indian Railways;
- (iv) Mechanical Engineering & Transportation (Power) Department of the Superior Revenue Establishment of Indian Railways;
- (v) Central Engineering Service, Class I;
- (vi) Central Engineering Service, Class II;
- (vii) Central Electrical Engineering Service, Class I;
- (viii) Central Electrical Engineering Service, Class II;
- (ix) Indian Inspection Service, Class I (Engineering Branch);
- (x) Indian Supply Service, Class I;
- (xi) Military Engineer Services, Class I, (Buildings and Roads Cadre);
- (xii) Military Engineer Services, Class I, (Electrical and Mechanical Cadre);
- (xiii) Indian Ordnance Factories Service, Class I;
- (xiv) Telegraph Engineering Service, Class I;
- (xv) Central Engineering Service (Roads), Class I.
- (xvi) Central Water Engineering (Class I) Service; and
- (xvii) Central Power Engineering (Class I) Service.

2. A candidate must apply to be admitted to the examination before such date, in such manner and in such form as the Commission may prescribe.

3. A candidate must be either :—

- (a) a citizen of India, or
- (b) a subject of Sikkim, or
- (c) a subject of Nepal, or
- (d) a subject of Bhutan, or
- (e) a Tibetan refugee who came over to India, before 1st January 1962, with the intention of permanently settling in India, or
- (f) a person of Indian origin who has migrated from Pakistan with the intention of permanently settling in India;

Provided that a candidate belonging to category (c), (d), (e) or (f) above shall be a person in whose favour a certificate of eligibility has been granted by the Government and if he belongs to category (f) the certificate of eligibility will be valid only for a period of one year from the date of his appointment, beyond which such a candidate will be retained in service subject to his having acquired Indian Citizenship.

Certificate of eligibility will not, however, be necessary in the case of candidates belonging to any one of the following categories :—

- (i) Persons who migrated to India from Pakistan before the nineteenth day of July, 1948, and have ordinarily been residing in India since then.
- (ii) Persons who migrated to India from Pakistan on or after the nineteenth day of July 1948, and have got themselves registered as citizens of India under Article 6 of the Constitution.
- (iii) Non-citizens in category (f) above who entered service under the Government of India before the commencement of the Constitution, *viz.*, 26th January 1950, and who have continued in such service since then without a break. Any such person who re-entered or may re-enter such service with break after the 26th January 1950, will, however, require certificate of eligibility in the usual way.

A candidate in whose case a certificate of eligibility is necessary may be admitted to the examination and he may also be provisionally appointed subject to the necessary certificate being granted in his favour by the Government.

4. (a) No male candidate who has more than one wife living or who, having a spouse living, marries in any case in which such marriage is void by reason of its taking place during the lifetime of such spouse, shall be eligible for appointment to any of the Services, appointments to which are made on the results of this competitive examination, unless the Government of India, after being satisfied that there are special grounds for doing so, exempt any male candidate from the operation of this rule.

(b) No female candidate whose marriage is void by reason of the husband having a wife living at the time of such marriage or who has married a person who has a wife living at the time of such marriage shall be eligible for appointment to any of the Services, appointments to which are made on the results of this competitive examination, unless the Government of India, after being satisfied that there are special grounds for doing so, exempt any female candidate from the operation of this rule.

5. (a) A candidate for this examination must have attained the age of 20 years and must not have attained the age of 25 years on the 1st August 1966, *i.e.*, he must have been born not earlier than the 2nd August 1941 and not later than the 1st August 1946.

(b) The upper age-limit of 25 years will be relaxable up to 30 years in the case of the Government servants of the following categories applying for Services other than the Telegraph Engineering Service, Class I, Indian Ordnance Factories Service, Class I and the Central Engineering Service (Roads), Class I, if they are employed in a Department/Office under the control of any of the authorities mentioned in column 1 below and apply for admission to the examination for the corresponding service mentioned in column 2.

- (i) A candidate who holds substantively a permanent post in the particular Department/Office concerned. This relaxation will not be admissible to a probationer appointed against a permanent post in the Department/Office during the period of his probation.
- (ii) A candidate who has been continuously in a temporary service in the particular Department/Office for at least 3 years on the 1st August 1966.
- (iii) A temporary Assistant Engineer recruited through the Commission to the Civil, Electrical, Signal and Mechanical and Transportation (Power) Departments of Indian Railways will also be eligible for this concession irrespective of the length of his service in the Department.

Column 1	Column 2
Railway Department	I.R.S.E. E.E.D. S.E.D. M. E. & T. P. Department
Central Public Works Department	C.E.S., Class I C.E.S., Class II C.E.E.S., Class I C.E.E.S., Class II
Directorate General of Supplies and Disposals.	I.S.S., Class I I.I.S., Class I
Engineer-in-Chief Army Head quarters.	M.E.S., Class I (B. & R. Cadre) M.E.S., Class I (E. & M. Cadre)
Central Water and Power Commission	C.W.E. (Class I) Service C.P.E. (Class I) Service

NOTE—The period of apprenticeship, if followed by appointment against a working post on the Railways, may be treated as Railway Service for the purpose of age concession.

(c) The upper age-limit of 25 years will be relaxable up to 30 years also in respect of candidates for the Telegraph Engineering Service, Class I, in the case of the following :—

(i) A candidate who holds substantively a permanent post in the Posts and Telegraphs Department. This relaxation will not be admissible to a probationer appointed against a permanent post in the Department during the period of his probation.

(ii) A candidate who has continuously held for a period of not less than 2 years on the 1st August 1966, any of the following temporary posts under the Posts and Telegraphs Department :

1. Repeater Station Assistant.
2. Foreman or Assistant Foreman, Telegraph Workshops.
3. Temporary Assistant, Engineer Workshops.
4. Engineering Supervisor.
5. Workshop Supervisor.

(d) The upper age-limit of 25 years will likewise be relaxable up to 30 years in respect of candidates for the Indian Ordnance Factories Service, Class I who hold substantively permanent appointments at the Ordnance Factories. This relaxation will not be admissible to a probationer appointed against a permanent post in the Ordnance Factories during the period of his probation.

PROVIDED THAT NO CANDIDATE SHALL BE PERMITTED, UNDER THE RELAXATION(S) OF THE UPPER AGE-LIMIT MENTIONED AT (b), (c) AND (d) ABOVE, TO COMPETE MORE THAN THREE TIMES AT THE EXAMINATION.

(e) The upper age-limit prescribed above will be further relaxable :—

- (i) Up to a maximum of five years if a candidate belongs to a Scheduled Caste or a Scheduled Tribe;
- (ii) Up to a maximum of three years, if a candidate is a *bona fide* displaced person from East Pakistan and has migrated to India on or after January 1, 1964;
- (iii) Up to a maximum of eight years, if a candidate belongs to a Scheduled Caste or a Scheduled Tribe and is also a *bona fide* displaced person from East Pakistan and has migrated to India on or after January 1, 1964;
- (iv) Up to a maximum of three years if a candidate is a resident of the Union Territory of Pondicherry and has received education through the medium of French at one stage or another;
- (v) Up to a maximum of three years if a candidate is an Indian citizen and is a repatriate from Ceylon;
- (vi) Up to a maximum of three years if a candidate is a resident of the Union Territory of Goa, Daman and Diu; and
- (vii) Up to a maximum of three years if a candidate is of Indian origin and has migrated from Kenya, Uganda and the United Republic of Tanzania (formerly Tanganyika and Zanzibar).

N.B. (i).—For the purposes of this Rule, a candidate shall be deemed to have competed at the examination once for all the Services/posts ordinarily covered by the examination if he competes for any one or more of the Services/posts.

A candidate shall be deemed to have competed at the examination if he actually appears in any one or more subjects.

N.B. (ii).—The candidature of a person who is admitted to the examination under the age concession mentioned in Rule 5(b), 5(c) and 5(d) above is liable to be cancelled, if, after submitting his application, he resigns from service or his services are terminated by his department/office, either before or after taking the examination. He will, however, continue to be eligible, if he is retrenched from the Service or post after submitting his application.

A candidate who, after submitting his application to his department, is transferred to other department/office, will be eligible to compete under departmental age concession for the service, for which he would have been eligible, but for his transfer, provided his application has been forwarded by his parent department.

SAVE AS PROVIDED ABOVE THE AGE LIMITS PRESCRIBED CAN IN NO CASE BE RELAXED.

6. A candidate already in Government Service, whether in a permanent or a temporary capacity, must obtain prior permission of the Head of the Department to appear for the examination.

7. A candidate must have—

- (a) obtained a degree in Engineering from a university incorporated by an Act of the Central or State Legislature in India or other educational Institutes established by an Act of Parliament, or declared to be deemed as Universities under Section 3 of the University Grants Commission Act, 1956; or
- (b) Passed Sections A and B of the Associate Membership Examination of the Institution of Engineers (India), or have any other educational qualifications recognised by that institution as exempting from passing these Sections; or
- (c) obtained an Engineering degree of one of the Universities mentioned in Appendix I under the conditions prescribed in that Appendix; or
- (d) passed the Honours Diploma Examination in Civil, Mechanical or Electrical Engineering of the Loughborough College, Leicestershire provided the candidate has passed the common preliminary examination or has been exempted therefrom; or
- (e) passed the Graduate Membership Examination of the Institution of Tele-communication Engineers (India); or
- (f) passed the Graduate Membership Examination of the Institute of Electronics and Radio Engineers, London, held after November 1959.

The Graduate Membership Examination of the Institution of Electronics and Radio Engineers, London, held prior to November 1959, is also acceptable subject to the following conditions :—

- (1) that the candidates who have passed the examination held prior to November 1959, should have appeared and passed in the following additional subjects :
  - (i) Principles and Applications of Electrical Engineering (in accordance with the syllabus prescribed in Section A of Post-1959 Scheme).
  - (ii) Mathematics II (in accordance with the syllabus prescribed in Section B of Post-1959 Scheme).
- (2) that the candidates concerned should produce a certificate from the Institution of Electronics and Radio Engineers, London, in fulfilment of the condition prescribed at (1) above.

NOTE 1.—Qualifications (e) and (f) will be applicable only to those candidates who are competing for Signal Engineering Department, Electrical Engineering Department and Mechanical Engineering and Transportation (Power) Department of the Superior Revenue Establishment of Indian Railways, the Telegraph Engineering Service, Class I, the Central Electrical Engineering Services, Class I and Class II, the Military Engineer Services, Class I (Electrical and Mechanical Cadre), the Central Water Engineering (Class I) Service (Mechanical Engineering Posts) and the Central Power Engineering (Class I) Service.

NOTE 2.—In exceptional cases, the Commission may treat a candidate, who has not any of the qualification prescribed in this rule, as educationally qualified provided that he has passed examinations conducted by other institutions, the standard of which in the opinion of the Commission, justifies his admission to the examination.

NOTE 3.—A candidate who has appeared at an examination the passing of which would render him eligible to appear at this examination, but has not been informed of the result, may apply for admission to the examination. A candidate who intends to appear at such a qualifying examination may also apply, provided that the qualifying examination is completed before the commencement of this examination. Such a candidate will be admitted to the examination, if otherwise eligible, but the admission would be deemed to be provisional and subject to cancellation if he does not produce proof of having passed the examination, as soon as possible, and in any case not later than two months after the commencement of this examination.

NOTE 4.—Candidates who are otherwise qualified but who have taken degrees from Foreign Universities which are not included in Appendix I, may also apply to the Commission and may be admitted to the examination at the discretion of the Commission.

8. The decision of the Commission as to the eligibility or otherwise of a candidate for admission to the examination shall be final.

No candidate shall be admitted to the examination unless he holds a certificate of admission from the commission.

9. A candidate who is or has been declared by the Commission guilty of impersonation or of submitting fabricated documents or documents which have been tampered with or of making statements which are incorrect or false or of suppressing material information or otherwise resorting to any other irregular or improper means for obtaining admission to the examination, or of using or attempting to use unfair means in the examination hall or of misbehaviour in the examination hall, may, in addition to rendering himself liable to criminal prosecution,—

(a) be debarred permanently or for a specified period :—

(i) by the Commission, from admission to any examination or appearance at any interview held by the Commission for selection of candidates; and

(ii) by the Government from employment under them;

(b) be liable to disciplinary action under the appropriate rules, if he is already in service under Government.

10. Any attempt on the part of a candidate to obtain support for his candidature by any means may disqualify him for admission.

11. The examination under these rules shall be conducted by the Commission in the manner prescribed in the regulations which form Appendix II to these rules.

12. Candidates must pay the fee prescribed in Annexure I to the Commission's Notice. No claim for a refund of the fee will be entertained except to the extent stated in that Annexure, nor can the fee be held in reserve for any other examination or selection.

13. Reservations will be made for candidates belonging to the Scheduled Castes and Scheduled Tribes in respect of vacancies as may be fixed by the Government of India.

Scheduled Castes/Tribes mean any of the Castes/Tribes mentioned in the Scheduled Castes/Tribes Lists (Modification) Order, 1956 read with Scheduled Castes and Scheduled Tribes Orders (Amendment) Act, 1956, the Constitution (Jammu and Kashmir) Scheduled Castes Order, 1956, the Constitution (Andaman and Nicobar Islands) Scheduled Tribes Order, 1959, the Constitution (Dadra and Nagar Haveli) Scheduled Castes Order, 1962, the Constitution (Dadra and Nagar Haveli) Scheduled Tribes Order, 1962 and the Constitution (Pondicherry) Scheduled Castes Order, 1964.

14. Candidates who obtain such minimum qualifying marks in the written examination as may be fixed by the Commission in their discretion shall be summoned by them for an interview for a personality test.

After the examination, the candidates will be arranged by the Commission in the order of merit as disclosed by the aggregate marks finally awarded to each candidate; and in that order so many candidates as are found by the Commission in their discretion to be qualified by the examination shall be recommended for appointment up to the number of unreserved vacancies decided to be filled on the results of the examination.

Provided that any candidate belonging to the Scheduled Castes or the Scheduled Tribes who though not qualified by the standard prescribed by the Commission for any service, is declared by them to be suitable for appointment thereto with due regard to maintenance of efficiency of administration, shall be recommended for appointment to vacancies reserved for members of the Scheduled Castes and the Scheduled Tribes, as the case may be, in that service.

15. Success in the examination confers no right to appointment, unless Government are satisfied, after such an enquiry as may be considered necessary that the candidate is suitable in all respects for appointment to the public service.

Due consideration will be given to the preferences expressed by a candidate at the time of his application, but the Government of India reserve the right to assign him to any Service/post for which he is a candidate.

NOTE.—The form and manner of communication of the result of the examination to individual candidates shall be decided by the Commission in their discretion and the Commission will not enter into correspondence with them regarding the result.

16. A candidate must be in good mental and bodily health and free from any physical defect likely to interfere with the discharge of his duties as an officer of the service. A candidate who (after such physical examination as Government or the appointing authority, as the case may be, may prescribe) is found not to satisfy those requirements will not be appointed. All candidates who are declared qualified for the Personality Test will be physically examined at the place where they are summoned for interview, either immediately before or after the interview. Candidates will have to pay a fee of Rs. 16.00 to the Medical Board. The fact that a candidate has been physically examined will not mean or imply that he will be considered for appointment.

In order to prevent disappointment candidates are advised to have themselves examined by a Government Medical Officer of the standing of a Civil Surgeon, before applying for admission to the examination. Particulars of the nature of the medical test to which candidates will be subjected before appointment and of the standards required are given in Appendix III.

P. C. MATHEW, Secy.

#### APPENDIX I

List of University degrees which will be recognised for admission to the examination [vide para 7(c) of the Rules.]

Aberdeen.—B.Sc. Engineering (Honours or Ordinary degree).

Cambridge.—Ordinary B.A. degree in engineering provided the graduate has passed in the principal subjects, Engineering I, Engineering II, and Engineering III.

Durham.—B.Sc. in Marine Engineering.

Glasgow.—B.Sc. in Naval Architecture (Honours or Ordinary degree).

NOTE.—The above degrees will be accepted only if taken after three years' study and passing the regular examinations in the several Universities. The conditions as to three years study will not, however, apply to Indians who, having taken an Indian degree which exempts them from part of the University course, shall have taken one of the above degrees in less than three years in accordance with the regulations of the University concerned.

#### APPENDIX II

1. The examination shall be conducted according to the following plan :—

##### Part I

Compulsory and Optional papers as given in para 2 below against each Service. The standard and syllabi prescribed for these papers are given in the Schedule to this Appendix. The duration of each of the papers except 'General Knowledge' will be of 3 hours. The duration of the paper 'General Knowledge' will be of 2 hours.

##### Part II

Personality test for such candidates as may be called by the Commission carrying a maximum of 300 marks. (Please see para 6 below).

2. The following will be the subjects for the written examination :—

Subjects	Maximum Marks
<b>A. Indian Railway Service of Engineers—</b>	
<b>(a) Compulsory—</b>	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Applied Mechanics (as under item 4 under Schedule to Appendix II)	200
(4) Construction :	
<i>Paper I—</i>	100
(i) Building Materials and Building Construction	200
(ii) Design of Structures	
<i>Paper II—</i>	100
Roads, Railways (General Principles governing the design of Railways, Roads, Harbours and other works)	200
(5) Surveying	
(6) Sanitary Engineering and Water Supply	100
<b>TOTAL</b>	<b>800</b>
<b>(b) Optional.—Any two of the following subjects:</b>	
(1) Prime Movers	100
(2) Hydraulics and Hydraulic Machines	100
(3) Electrical Engineering	100
(4) Architecture and Town Planning	100
(5) Mechanical Engineering	100
<b>B. Electrical Engineering Department—</b>	
<b>(a) Compulsory—</b>	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Electrical Engineering	200
(4) Mechanical Engineering	200
(5) Applied Mechanics (as under item 5 under Schedule to Appendix II)	200
<b>TOTAL</b>	<b>800</b>

<i>Subjects</i>	<i>Maximum Marks</i>
(b) <i>Optional</i> —Any two of the following subjects:	
(1) Physics (including Electricity and Magnetism)	100
(2) Applied Mathematics	100
(3) Surveying	100
(4) Electrical Communication Engineering	100
(5) Workshop Organisation and Management	100
<b>C. Signal Engineering Department—</b>	
(a) <i>Compulsory</i> —	
(1) English (including Essay and Precis writing)	100
(2) General Knowledge	100
(3) Electrical Engineering	200
(4) Electrical Communication Engineering	200
(5) Mechanical Engineering	200
<b>TOTAL</b>	<b>800</b>
(b) <i>Optional</i> —Any two of the following subjects:	
(1) Physics (including Electricity and Magnetism)	100
(2) Applied Mechanics (as under item 5 under Schedule to Appendix II)	100
(3) Applied Mathematics	100
(4) <i>Construction</i> :	
<i>Paper I</i> —	50
(i) Building Materials and Building Construction	100
(ii) Design of Structures.	
<i>Paper II</i> —	50
Roads, Railways (General Principles governing design of Railways, Roads, Harbours and other works)	100
(5) Workshop Organisation and Management	
(6) Applied Electronic Circuits	100
<b>D. Mechanical Engineering and Transportation (Power) Department of the Superior Revenue Establishment of Indian Railways—</b>	
(a) <i>Compulsory</i> —	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Applied Mechanics (as under item 5 under Schedule to Appendix II)	200
(4) Theory of Machines and Machine Design	200
(5) Prime Movers	200
<b>TOTAL</b>	<b>800</b>
(b) <i>Optional</i> —Any two of the following subjects:	
(1) Hydraulics and Hydraulic Machines	100
(2) Electrical Engineering	100
(3) Metallurgy	100
(4) Workshop Technology	100
(5) Physics (including Electricity and Magnetism)	100
(6) Workshop Organisation and Management	100
<b>E. &amp; F. Central Engineering Services, Class I and Class II—</b>	
(a) <i>Compulsory</i> —	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Applied Mechanics (as under item 4 under Schedule to Appendix II)	200
(4) <i>Construction</i> :	
<i>Paper I</i> —	100
(i) Building Materials and Building Construction	100
(ii) Design of Structure	
<i>Paper II</i> —	100
Roads, Railways (General Principles governing the design of Railways, Roads, Harbours and other works)	200
(5) Surveying	
(6) Sanitary Engineering and Water Supply	100
<b>TOTAL</b>	<b>800</b>
(b) <i>Optional</i> —Any two of the following subjects:	
(1) Prime Movers	100
(2) Hydraulics and Hydraulic Machines	100
(3) Electrical Engineering	100
(4) Mechanical Engineering	100
(5) Architecture and Town Planning (For class I only)	100

<i>Subjects</i>	<i>Maximum Marks</i>
<b>G. &amp; H. Central Electrical Engineering Services, Class I and Class II—</b>	
(a) <i>Compulsory</i> —	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Electrical Engineering	200
(4) Mechanical Engineering	200
(5) Applied Mechanics (as under item 5 under Schedule to Appendix II)	200
<b>TOTAL</b>	<b>800</b>
(b) <i>Optional</i> —	
Any two of the following subjects:	
(1) Physics (including Electricity & Magnetism)	100
(2) Electrical Communication Engineering	100
(3) Prime Movers	100
(4) Applied Mathematics	100
(5) Hydraulics and Hydraulic Machines	100
<b>I. Indian Inspection Service, Class I (Engineering Branch)</b>	
<i>Plan 1—</i>	
(a) <i>Compulsory</i> —	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Electrical Engineering	200
(4) Mechanical Engineering	200
(5) Applied Mechanics (as under item 5 under Schedule to Appendix II)	200
<b>TOTAL</b>	<b>800</b>
(b) <i>Optional</i> —	
Any two of the following subjects:	
(1) Physics (including Electricity and Magnetism)	100
(2) Electrical Communication Engineering	100
(3) Prime Movers	100
(4) Applied Mathematics	100
(5) Hydraulics and Hydraulic Machines	100
<i>Plan 2—</i>	
(a) <i>Compulsory</i> —	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Applied Mechanics (as under item 5 under Schedule to Appendix II)	200
(4) Theory of Machines and Machine Design	200
(5) Prime Movers	200
<b>TOTAL</b>	<b>800</b>
(b) <i>Optional</i> —	
Any two of the following subjects:	
(1) Hydraulics and Hydraulic Machines	100
(2) Electrical Engineering	100
(3) Metallurgy	100
(4) Workshop Technology	100
(5) Physics (including Electricity and Magnetism)	100
(6) Workshop Organisation & Management	100
<i>Plan 3—</i>	
(a) <i>Compulsory</i> —	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Applied Mechanics (as under item 4 under Schedule to Appendix II)	200
(4) <i>Construction</i> :	
<i>Paper I</i> —	100
(i) Building Materials and Building Construction	100
(ii) Design of Structures	
<i>Paper II</i> —	100
Roads, Railways (General Principles governing the design of Railways, Roads, Harbours and other works.)	200
(5) Surveying	
(6) Sanitary Engineering and Water Supply	100
<b>TOTAL</b>	<b>800</b>

Subjects	Maximum Marks
<b>(b) Optional—</b>	
Any two of the following subjects:—	
(1) Prime Movers	100
(2) Hydraulics and Hydraulic Machines	100
(3) Electrical Engineering	100
(4) Mechanical Engineering	100
<b>J. Indian Supply Service, Class I—</b>	
<b>Plan 1—</b>	
<b>(a) Compulsory—</b>	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Applied Mechanics (as under item 5 under Schedule to Appendix II)	200
(4) Theory of Machines and Machine Design	200
(5) Prime Movers	200
<b>TOTAL</b>	<b>800</b>
<b>(b) Optional—</b>	
Any two of the following subjects:—	
(1) Hydraulics and Hydraulic Machines	100
(2) Electrical Engineering	100
(3) Metallurgy	100
(4) Workshop Technology	100
(5) Physics (including Electricity and Magnetism)	100
(6) Workshop Organisation and Management	100
<b>Plan 2—</b>	
<b>(a) Compulsory—</b>	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Electrical Engineering	200
(4) Mechanical Engineering	200
(5) Applied Mechanics (as under item 5 under Schedule to Appendix II)	200
<b>TOTAL</b>	<b>800</b>
<b>(b) Optional—</b>	
Any two of the following subjects:—	
(1) Physics (including Electricity and Magnetism)	100
(2) Electrical Communication Engineering	100
(3) Prime Movers	100
(4) Applied Mathematics	100
(5) Hydraulics and Hydraulic Machines	100
<b>K. Military Engineer Services, Class I (Buildings and Roads Cadre and Electrical and Mechanical Cadre)</b>	
<b>Buildings and Roads Cadre—</b>	
<b>(a) Compulsory—</b>	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Applied Mechanics (as under item 4 under Schedule to Appendix II)	200
(4) Construction :	
<b>Paper I—</b>	100
(i) Building Materials and Building Construction	200
(ii) Design of Structures	
<b>Paper II—</b>	100
Roads, Railways, (General Principles governing the design of Railways, Roads, Harbours and other works)	200
(5) Surveying	
(6) Sanitary Engineering and Water Supply	100
<b>TOTAL</b>	<b>800</b>
<b>(b) Optional—</b>	
Any two of the following subjects:—	
(1) Prime Movers	100
(2) Hydraulics and Hydraulic Machines	100
(3) Electrical Engineering	100
(4) Mechanical Engineering	100
(5) Architecture and Town Planning	100

Subjects	Maximum Marks
<b>Electrical and Mechanical Cadre—</b>	
<b>(a) Compulsory—</b>	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Electrical Engineering	200
(4) Mechanical Engineering	200
(5) Applied Mechanics (as under item 5 under Schedule to Appendix II)	200
<b>TOTAL</b>	<b>800</b>
<b>(b) Optional—</b>	
Any two of the following subjects:—	
(1) Physics (including Electricity and Magnetism)	100
(2) Electrical Communication Engineering	100
(3) Prime Movers	100
(4) Applied Mathematics	100
(5) Hydraulics and Hydraulic Machines	100
<b>L. Indian Ordnance Factories Service, Class I—</b>	
<b>(a) Compulsory—</b>	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Mechanical Engineering	200
(4) Applied Mechanics (as under item 5 under Schedule to Appendix II)	200
(5) Electrical Engineering	200
<b>TOTAL</b>	<b>800</b>
<b>(b) Optional—</b>	
Any two of the following subjects:—	
(1) Physics (including Electricity and Magnetism)	100
(2) Applied Mathematics	100
(3) Prime Movers	100
(4) Hydraulics and Hydraulic Machines	100
(5) Workshop Technology	100
(6) Workshop Organisation and Management	100
(7) Theory of Machines and Machine Design	100
<b>M. Telegraph Engineering Service, Class I—</b>	
<b>(a) Compulsory—</b>	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Electrical Communication Engineering	100
(4) Electrical Engineering	150
(5) Applied Mathematics	10
(6) Mechanical Engineering	150
<b>TOTAL</b>	<b>700</b>
<b>(b) Optional—</b>	
Any two of the following subjects:—	
(1) Prime Movers	100
(2) Physics (including Electricity and Magnetism)	100
(3) Applied Mechanics (as under item 5 under Schedule to Appendix II)	100
<b>N. Central Engineering Service (Roads), Class I—</b>	
<b>(a) Compulsory—</b>	
(1) English (including Essay and Precis Writing)	100
(2) General Knowledge	100
(3) Applied Mechanics (as under item 4 under Schedule to appendix II)	200
(4) Construction :	
<b>Paper I—</b>	100
(i) Building Materials and Building Construction	200
(ii) Design of Structures	
<b>Paper II—</b>	100
Roads, Railways, (General Principles governing the design of Railways, Roads, Harbours and other works)	200
(5) Surveying	
(6) Sanitary Engineering and Water Supply	100
<b>TOTAL</b>	<b>800</b>



Subjects	Maximum Marks
<b>(b) Optional—</b>	
Any two of the following subjects:—	
(1) Prime Movers . . . . .	100
(2) Hydraulics and Hydraulic Machines . . . . .	100
(3) Electrical Engineering . . . . .	100
(4) Architecture and Town Planning . . . . .	100
(5) Mechanical Engineering . . . . .	100
<b>O. Central Water Engineering (Class I) Service—</b>	
<i>Civil Engineering Posts—</i>	
<b>(a) Compulsory—</b>	
(1) English (including Essay and Precis Writing) . . . . .	100
(2) General Knowledge . . . . .	100
(3) Applied Mechanics (as under item 4 under Schedule to Appendix II) . . . . .	200
(4) Construction—	
<i>Paper I</i> . . . . .	100
(i) Building Materials and Building Construction . . . . .	200
(ii) Design of Structures . . . . .	
<i>Paper II—</i>	
Irrigation (General principles governing the designs of Dams, Barrages, Canals, Canal Structures, Navigation, Locks, Gates and Hoists). . . . .	200
(5) Surveying . . . . .	
(6) Hydraulics and Hydraulic Machines . . . . .	100
<b>TOTAL</b> . . . . .	<b>800</b>

**(b) Optional—**

Any two of the following subjects:—

(1) Physics (including Electricity and Magnetism) . . . . .	100
(2) Prime Movers . . . . .	100
(3) Sanitary Engineering and Water Supply . . . . .	100
(4) Electrical Engineering . . . . .	100
(5) Architecture and Town Planning . . . . .	100
(6) Hydrology . . . . .	100

**Mechanical Engineering Posts—****(a) Compulsory—**

(1) English (including Essay and Precis Writing) . . . . .	100
(2) General Knowledge . . . . .	100
(3) Applied Mechanics (as under item 5 under Schedule to Appendix II) . . . . .	200
(4) Theory of Machines and Machine Design . . . . .	200
(5) Prime Movers . . . . .	200
<b>TOTAL</b> . . . . .	<b>800</b>

**(b) Optional—**

Any two of the following subjects:—

(1) Hydraulics and Hydraulic Machines . . . . .	100
(2) Electrical Engineering . . . . .	100
(3) Metallurgy . . . . .	100
(4) Workshop Technology . . . . .	100
(5) Physics (including Electricity and Magnetism) . . . . .	100
(6) Workshop Organisation and Management . . . . .	100

**P. Central Power Engineering (Class I) Service—***Electrical Engineering Posts—***(a) Compulsory—**

(1) English (including Essay and Precis Writing) . . . . .	100
(2) General Knowledge . . . . .	100
(3) Applied Mechanics (as under item 5 under Schedule to Appendix II) . . . . .	200
(4) Electrical Engineering . . . . .	150
(5) Generation, Transmission and Distribution of Power . . . . .	150
(6) Mechanical Engineering . . . . .	100
<b>TOTAL</b> . . . . .	<b>800</b>

**(b) Optional—**

Any two of the following subjects:—

(1) Hydraulics and Hydraulic Machines . . . . .	100
(2) Prime Movers . . . . .	100
(3) Electrical Communication Engineering . . . . .	100
(4) Workshop Organisation and Management . . . . .	100

Subjects	Maximum Marks
<b>Mechanical Engineering Posts—</b>	
<b>(a) Compulsory—</b>	
(1) English (including Essay and Precis Writing) . . . . .	100
(2) General Knowledge . . . . .	100
(3) Applied Mechanics (as under item 5 under Schedule to Appendix II) . . . . .	200
(4) Theory of Machines and Machine Design . . . . .	200
(5) Prime Movers . . . . .	200
<b>TOTAL</b> . . . . .	<b>800</b>

**(b) Optional—**

Any two of the following subjects:—

(1) Hydraulics and Hydraulic Machines . . . . .	100
(2) Electrical Engineering . . . . .	100
(3) Metallurgy . . . . .	100
(4) Workshop Technology . . . . .	100
(5) Physics (including Electricity and Magnetism) . . . . .	100
(6) Workshop Organisation and Management . . . . .	100

3. All papers must be answered in English.

4. Candidates must write the papers in their own hand. In no circumstances will they be allowed the help of a scribe to write the answers for them.

5. The Commission have discretion to fix qualifying marks in any or all the subjects of the examination.

6. Special attention will be paid in the Personality Test to assessing the candidates' capacity for leadership, initiative and intellectual curiosity, tact and other social qualities, mental and physical energy, powers of practical application and integrity of character.

7. From the marks assigned to candidates in each subject such deduction will be made as the Commission may consider necessary in order to secure that no credit is allowed for merely superficial knowledge.

8. Deductions up to 5 per cent. of the maximum marks for the written subjects will be made for illegible handwriting.

9. Credit will be given for orderly, effective and exact expression combined with due economy of words in all subjects of the examination.

**SCHEDULE TO APPENDIX II****Standard and Syllabus**

The standard of papers in English and General Knowledge will be such as may be expected of an Engineering Graduate. The standard of papers in other subjects will approximately be that of an Engineering Degree examination of an Indian University. There will be no practical examination in any of the subjects.

**1. ENGLISH**

Questions to test the understanding of and the power to write English. Passages will usually be set for summary or precis.

**2. GENERAL KNOWLEDGE**

General knowledge including knowledge of current events and of such matters of every day observation and experience in their scientific aspects as may be expected of an educated person who has not made a special study of any scientific subject. The paper will also include questions on Indian History and Geography of a nature which candidates should be able to answer without special study.

**3. APPLIED MATHEMATICS**

*Statics.*—Vectors, Notation of force, Gravitational or Engineers' unit of force. Various kinds of forces. Friction. Composition and resolution of concurrent forces. Moments. Parallel forces and centres of gravity couples. Conditions of equilibrium of non-current coplanar forces. Funicular Polygon.

*Kinematics.*—Units of space and time. Rectilinear motion; motion of a projectile; angular motion, relative motion; simple harmonic motion.

*Kinetics.*—Newton's Laws. Absolute system of units. Linear momentum. Impact of elastic bodies. Impulse and impulsive forces, angular momentum; moments of inertia and radii of gyration; impulsive torque. Centrifugal forces. Conical pendulum. Motion of the centre of mass. Canton railway curves and banking of road-tracks. Hoop stress and stress in the rim of a fly-wheel.

Work, power, kinetic and potential energy. Principle of energy. Kinetic energy due to rotation. Works done by a couple. Principle of Virtual work. Simple machines, mechanical advantage, and velocity ratio. Stable and unstable equilibrium. Deflection in a framed structure. Oscillations. Simple and Compound pendulum. Units and dimensions.



**Hydrostatics.**—Fluid pressure, its transmission and measurements, density; specific gravity; metric system of units; resultant pressure; centre of pressure; equilibrium of floating bodies; metacentre; Laws of Boyle and Charles. Mixture of gases. Nature and action of simple hydraulic machines.

#### 4. APPLIED MECHANICS

[For Indian Railway Service of Engineers, Central Engineering Services, Class I & Class II, Indian Inspection Service (Engineering Branch—Plan 3), Military Engineer Services (Buildings & Roads Cadre), Central Engineering Service (Roads), Class I and Central Water Engineering (Class I) Service (Civil Engineering Posts) only.]

##### (a) Buildings

Consideration of material used in construction of roof-trusses. Steel and timber. Determination of stress in trusses by various methods. Dead-loads and wind pressure. Factors of safety and working stresses.

**Design of roof-trusses.**—Various types of roof-trusses and roof coverings; collar beam and hammer beam trusses.

Use of Euler's, Gordon's, Rankine's, Fidler's, Johnson's, and straight line formulae in the design of struts. Buckling factors of struts; curves showing comparative strength of struts obtained by various formulae. Choice of size of sections. Finish of steel work, Joints, Design of end bearings; methods of fixing and supporting ends.

Application of circle and ellipse of stress and Clapeyron's theorem to design of structures.

**Cast Iron and Steel Columns.**—Flange and web connections to steel columns; caps; bases; transverse bracing of columns.

**Foundations.**—Safe pressures; foundations for columns. Slab foundations; cantilever foundation; Grillage foundations; Wells; piles.

**Retaining Walls and earth pressure.**—Rankine's theory; Wedge theory, Winger's and Bligh's graphical constructions, with corrections. Design of various types of retaining walls in masonry.

**Talk Masonry and Steel Chimneys.**—Theory and design.

**Design of steel and masonry.**—Reservoirs with considerations of wind pressure.

Deflection of framed structures and determination of stresses, etc., in redundant frames.

Influence diagrams for bending moment and shear for uniformly distributed and irregular loads on trusses, built-in beams and three-pinned, parabolic semi-elliptic and semi-circular arches.

General principles of dome design.

Principles of Building Design; consideration of loads on buildings. Steel Works, girders, etc., for buildings.

##### (b) Bridges

Design of superstructure. Determination by graphical and analytical methods of bending moment due to moving loads. Wind pressures.

Design of masonry bridges and culverts.

Plate-web girders. Analysis of stresses.

Warren and lattice girders.

Three-pinned arches; doubly pinned and rigid arches.

General consideration on the design of Suspension, cantilever and tabular bridges. Steel-arches bridges, Swing bridges.

##### (c) Reinforced Concrete

Shears bond and diagonal tension, its nature evaluation and location of reinforcement.

Design of simple and doubly reinforced beams and continuous beams.

Theory and design of reinforced concrete columns and piles. Design of slab foundations.

Design of simple cantilever and counterfort retaining walls. Equivalent moments of inertia for reinforced concrete sections.

Theory of elastic deflections and outline of investigation of stresses in reinforced concrete arches.

##### (d) General

Analysis of stress, analysis of strain, elastic limit and ultimate strength relation between the elastic constants. Launhardt-Weyrach formula for working stresses in a structural member and determination of its cross-sectional area. Repetition of stresses. Bending moment and shearing force diagrams for dead-loads. Graphical determination of stresses in frames; effect of wind pressure; method of sections. Stress in the cross-section of a beam due to bending ( $M/I = F/Y = E/R$ ); compound and conjugated stresses. Rankine's theory of earth pressure; depth of foundations and strength of footings. Grillage foundations; Columb's theory of earth pressure; modification due to Rebahn.

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Bending moment and shearing force diagrams for live loads. Analysis of uniform and uniformly varying stress. Elastic theory of bending of beams; bending and shear stresses in beams. Modulus of section and equivalent areas. Maximum and minimum stresses in a joint due to eccentric loading, stresses in dams and chimneys. Stability of block-work structure. Design of rivetted joint and stresses in boiler shells. Euler's theory concerning struts; modifications due to Rankine, Gordon and others. Torsion. Combined torsion and bending deflections. Encastre beams. Continuous beams and theorem of three moments. Elastic theory of arches. Masonry arches.

#### 5. APPLIED MECHANICS

[For Services other than Indian Railway Service of Engineers, Central Engineering Services, Class I & Class II, Indian Inspection Service (Engineering Branch—Plan 3), Military Engineer Services (Buildings & Roads Cadre), Central Engineering Service (Roads), Class I and Central Water Engineering (Class I) Service (Civil Engineering Posts).]

(a) **Statics**: Forces acting on a rigid body; moments of forces; composition and resolution of forces; friction; machines; efficiency; couples; conditions of equilibrium, with application to simple framed structures and beams; bending moment and shear force diagrams for dead-loads.

(b) **Hydrostatics**: Pressure at a point in a liquid, centre of pressure on an immersed plane area, equilibrium of floating bodies.

(c) **Kinematics (of Motion in a plane)**: Velocity and acceleration of a point; relative motion; acceleration of a point moving in a circular path with uniform speed; simple harmonic motion; velocity-ratio; diagrams of simple mechanisms; instantaneous centre.

(d) **Kinetics**: Force, mass, impulse momentum, works energy, power, moment of momentum, moment of inertia; their relations and measurements; conservation of energy; conservation of linear momentum; rectilinear motion of a body under a force (constant or variable), equation of motion of a particle; motion of body in circular path with uniform speed balancing of rotating masses; rotation and oscillation of a body about a fixed axis.

(e) **Hydraulics**: Pressure and velocity change along a streamline; Bernoulli's theorem; flow through an orifice.

(f) **Stress and Strain**: Stress and strain in tension, compression and shear; Hooke's law; Relations between elastic constant; combined stress in two dimensions; circle diagrams; compound bars in tension and compression; elementary consideration of stress due to temperature changes.

(g) Bending moment and shearing force diagrams for live loads. Analysis of uniform and uniformly varying stress; elastic theory of bending of beams; bending and shear stresses in beams; Modulus of section and equivalent areas; maximum and minimum stresses in a joint due to eccentric loading; design of rivetted joints and stresses in boiler shells; welded joints.

(h) **Cylinders**: Thin cylindrical and spherical shells under internal pressure; stress in thick-walled cylinders under internal and external pressure; force and shrink fits.

(i) **Torsion**: Torsion of round bars. transmission of power by shafts.

(j) **Combined Stresses**: Combined bending and direct stress and combined bending and torsion.

(k) **Strain Energy**: Work done in elastic deformation; Stresses due to suddenly applied loads.

(l) **Springs**: Laminated springs and close-coiled helical springs.

(m) **Struts**: Elementary theory of struts with use of empirical formulae.

(n) **Property of materials**: The mechanical properties of materials; composition and properties of the important metals used by engineers; effect of heat treatment, annealing and normalizing; effect of cold work on the properties of metals; elasticity, plasticity, ductility, tenacity, hardness, resistance to shock; resistance of repeated and alternating stress; effect of form and surface conditions; failure under combined stress; creep at high temperatures; considerations affecting the choice of the safe working stress in design.

#### 6. ELECTRICAL ENGINEERING

**Direct Current.**—Principles of generators and motor. Types and characteristics. Starting and controlling appliances. Methods of testing of generators and motors. Operation in Parallel of direct current generators. Types and general features of primary batteries. Testing of primary batteries. Types and testing of storage batteries. Method of charging Boosters and other auxiliary appliances.

**Alternating Currents.**—Production of alternating currents. Frequency and wave shape Graphic representation of current, voltage and power in A.C. Circuits. Maximum and "R.M.S." Value of simple sine wave. Effect of resistance inductance and capacity in A.C. circuit. Power and power factor in A.C. circuit. Single phase and poly-phase currents. Connections of poly-phase systems. Power Measurement in poly-phase circuits. Theory of alternator and its regulation. Parallel running Theory of transformer. Transmission of poly-phase

currents, Synchronous motors and Induction motors. Methods of starting. Efficiency and characteristics. Circle diagrams and testing of motors. Improvement of power factor. Motor converter and rotary converter and methods of starting of rotary converter. Principle of automatic voltage regulator.

**Electrical Instruments and Measurements.**—Principles of construction and theory of measuring instruments for direct and alternating currents. Commercial types. Calibrations of instruments. Measurements of resistances. Ohm-Meters. Types of bridges for measuring resistances. Potentiometer Phase and frequency meters. Synchroscope. Type of wattmeter.

**Transmission and Distribution of Electrical Energy.**—Systems of supply. economic voltage and size of conductor. Formulae for determination of size of conductor for standard systems of distribution of the load, voltage, etc., being given. Factors influencing voltage drop in D.C. and A.C. transmission lines. Influence of power factor of the load on voltage regulation of a transmission line. Standard equipment of generator and motor control panels for different types of D.C. and A.C. generators and motors.

## 7. PHYSICS (INCLUDING ELECTRICITY AND MAGNETISM)

**Heat.**—The methods of calorimetry and thermometry. Vapor-pressure, critical temperature and pressure. Conduction and diffusion of heat and the determination of constants. Radiation and absorption; laws of cooling. Theory of exchanges; methods of measuring radiation, laws of thermodynamics; simple applications.

**Light.**—Velocity of light; Illumination, photometry. Archromatism in lens system; direct-vision spectroscopy.

**The wave theory.**—Simple interference phenomena. Huygen's principle explanation of straight line propagation, reflection and refraction of light. Action of mirror lenses, etc. reviewed from this standpoint. Simple diffraction phenomena. Gratings, and wavelengths determination. Spectrum analysis; Doppler's principle. Double refraction and polarization of light; rotary polarization; simple application.

**Magnetism.**—Forces on a magnet in a magnetic field. Determination of axes and moment of magnet. Magnetic potential level surfaces. Interaction of two short magnets; determination of field strength magnetic shell; its potential energy in magnetic field. Total normal induction. Gauss' theorem; number of lines of force. Magnetic induction in iron, etc. Theory of magnetism.

The magnetic field of the earth; elements and their variations; the compass and its corrections.

**Electricity.**—Electric capacity, specific inductive capacity. Distribution of electricity on surface of conductors; images. Value of electric force in simple cases of distribution. The mechanical force on charged conductors energy of electrified systems. The dielectric medium; dielectric displacement currents.

Wheatstone's bridge, specific resistance; resistance thermometers. Conductivity of electrolytes; ionization; migration phenomena; accumulators. Standard cells; the potentiometer system of measurement. Thermoelectricity, application of thermo-dynamics; thermoelectric diagrams. Electro-magnetic induction; coefficients of induction; induction coils. Energy of circuit carrying current when placed in a magnetic field; mechanical force on conductors carrying current; moving coil instruments. Lenz's law; illustration from dynamo and motors; etc. Determination of current resistance; E.M.F. in absolute measure. The discharge of a condenser; electric waves. Elementary theory of the electron.

The elementary theory of the continuous current dynamo and motor and of the alternating current dynamo. General principles of the application of electricity to lighting, power transmission; telegraphy etc.

**Sound.**—The transmission of energy through material media by wave-motion; speed of propagation of waves of permanent type. Nature of musical sounds; pitch; scales. Reflection and refraction of sound; influence of wave-length. The vibration of strings, bars, plates and gas columns, resonance. Interference and diffraction phenomena. Analysis of sound. Measurement of wave-length, velocity and pitch.

## 8. PRIME MOVERS

**Fuel Gas Plants and Boilers.**—

**Fuel.**—

(a) Coal, Wood, petroleum, gas, petrol, alcohol, etc.; Physical characteristics, approximate chemical composition; heat of combustion.

(b) **Gas Plant.**—Gas producers; pressure and suction plants arrangement and working.

(c) **Boilers.**—Draught; natural, forced and induced. Ordinary forms of stationary, locomotive, marine, water-tube and other type; heating surface, firegrate area; boiler efficiency; superheaters; feedwater heaters; accessories and management.

**Theory of Heat Engines.**—

(a) Thermodynamical principles; Carnot's cycle, perfect heat engine; second law.

(b) **Air engines.**—Stirling and other forms.

(c) **Internal Combustion Engines.**—Gas, oil and petrol engines; types and working: features of cycles. Proportioning of mixtures; efficiencies.

(d) **Steam.**—Thermodynamics of the generation, expansion and condensation of steam; heat diagrams; etc.

(e) **Steam Engines and turbines,** with special reference to modern developments.

(f) **Refrigerating Plants.**—Theory and general arrangement of the more common types.

(g) **Air Compressors.**—Theory of Pneumatic working.

**Generating Plant, Accessories and Details.**—

(a) General arrangements and construction of the more important types.

(b) **Condensers** air-pumps, circulating pumps, cooling tanks, etc.

(c) **Carburettors and systems of ignition.**

(d) **Cylinders, pistons, cross-heads, guides, connecting rods, cranks, governors, fly-wheels, valves, and valve gears, glands and pipes.**

(e) **Engine-Testing.**—Consumption of steam and fuel, gas and oil, breaks and dynamometers; indicators and indicator diagrams.

## 9. HYDRAULICS AND HYDRAULIC MACHINES

**Hydraulics.**—Definitions relating to flow of water stream-line motion. Bernoulli's theorem. Venturimeter.

Flow of water through small and large orifices, drowned orifices; sudden enlargements and contractions in flow of water. Time of emptying tanks. Flood absorptive capacity of tanks.

Flow of water over notches and weirs.

Flow of water through pipes; hydraulic gradients; losses of head due to bands contraction and sudden enlargements; losses of head through siphons. Impacts at bends and thrust blocks.

Flow of water in open channels and in pipe; Chezy Bazin. Kutters and other formulae and their applications; cross sections of greatest efficiency.

Calculations of afflux and back water curve.

Gauging the flow of water in open channels, watermeters.

Hydraulics and hydrostatics of weirs and other canal works.

Hydrokinetics; uniform and steady flow streamline and turbulent motion. Bernoulli's theorem and its application.

Discharge through orifices and mouth pieces, and over notches and weirs. Variable heads. Laws of fluid friction. Head lost due to friction.

**Hydraulic Machinery.**—Impact of water on fixed and moving vane. Turbines, impulses and reaction. Description of different types of turbines. Determination of vane angles. Efficiencies of turbine plant. Governing.

**Pumps.**—Reciprocating centrifugal and turbine.

## 10. CONSTRUCTION

### PAPER I.—(i) BUILDING MATERIALS

**Stones.**—General characteristics of building stones. Chief varieties and uses. Quarrying. Blasting. Crushing. Screening. Dressing. Machinery and Tools used. Strength. Causes of decay and methods of preservation. Tests. Artificial stone. Manufacture and use.

**Bricks and Tiles.**—

General characteristics, varieties and use. Manufacture. Selecting clay, moulding and burning in kilns, Bull's and Hoffman's kilns, Causes of decay and methods of preservation. Strength. Essentials of good bricks. Mangalore and country tiles. Salt glazed pipes and China clay ware. Terracotta and refractory materials. Cement Block hollow and solid. Cement tiles, flooring, etc. Dados, etc. Machinery used.

**Glass and plastics.**—

**Glass.**—General characteristics, varieties, composition, manufacture and uses. **Plastic.**—Composition, properties and uses of celluloid, bakelite, ebonite, vitrolite, marbarite, etc.

**Cement, limes, mortars and concrete.**—

**Cement.**—Composition and manufacture, Storing, varieties and use. Normal rapid hardening and low heat cements, Aluminous Cements; Properties B.S.S., Tests.

**Limes.**—Hydraulic and fat. Occurrence, collection, burning, slacking and storing artificial hydraulic limes; gypsum; Plaster of Paris. Properties and uses. Tests.

**Sand Pozzulona.**—Properties, grading fineness, modulus, etc. Tests.

**Mortars.**—Lime mortars; ordinary and hydraulic. Use of sand and surkhi Composition. Preparation mixing and grinding Storing. Uses. Properties. Strength and tests. Cement mortars. Composition, preparation and use. Properties, gauged mortars. Proportioning of materials in mortars. Effect of water on strength. Mud mortars and effect of water on their strength.

**Concrete.**—Lime concrete composition, preparation and use. Properties and strength test cement modulus and mixing. Water-cement ratio. Properties strength, uses and tests. Water proofing and surface treatment.

**Timber.**—Varieties, classification, characteristics test and uses of Indian timber. Defect in timber and concrete-constituents—Proportioning, grading, fineness, causes of decay, Seasoning and preservation. Fire proofing. Market and standard sizes for different purposes.

Plywood and pressed wood. Manufacture properties and uses. Proprietary timber products used for sound; thermal products; used for sound and thermal insulation.

**Masonry :—**

**Stone masonry.**—Materials, dressing, laying and jointing. Instruments and tools, Classes of masonry, uncoursed and coursed rubble, random rubble, ashlar and block-in-course. Bonding of stones, Dry stone masonry. Pitching, Lifting devices; scaffolding. Terms used in masonry. Strength of and safeloads on masonry. Plain masonry and brick-work masonry.

Materials, brick laying and bonding, brick nogging. Brick laying in footings damp proof course, isolated columns, piers chimneys, fire places, arches, vaults domes, inverts, centerings etc. Reinforced brick work. Scaffolding. Strength of brick masonry. Safe loads on brick work.

**Iron and Steel :—**

Varieties, classification, composition, characteristics, tests and uses of iron and steel. Important iron ores and their properties. Elements of manufacture of iron and steel by different processes. Modern steels and alloy steels, their properties and uses. Rolling mills for mild steel section and types of British standard sections for structural steel. Metallic products, pipes, tube, plain and corrugated iron sheets. Cast iron and steel casting. Flaws in iron and steel.

**Preservatives.**—Composition, preparation properties, tests and uses of paints, polishes, varnishes, distempers and oils and pigments used.

**Miscellaneous—**

I. Carbonaceous cementing materials; asphalt and bitumen, natural and artificial asphaltic, products. Properties and uses.

II. Asbestos and asbestos cement sheets, masonite, celotex, teetex and other products. Properties and uses.

III. Rubber, leatherfelt, coir and their products, wire ropes, properties and uses.

## (ii) DESIGN OF STRUCTURES

**Buildings.**—Preliminary investigations as to the suitability of site for different types of buildings, trial pits and borings, determination of bearing capacity of soils. Design of residential houses.

**Foundations.**—(a) General : Structural properties of soil, Principles of mechanics of resistance of soils.

Examination of soils probing sounding and borings; (wash boring, percussion boring, rotary boring) Boring tools. Trial pits. Testing soils for bearing pressure : Direct and indirect tests. Test piles.

(b) Bearing capacity of soils : Rock, clay and sandy soils : alluvium : quicksand. Black cotton soil. Reclaimed soil. Improving bearing capacity of soils by various methods. Transmission of Load to foundations dead load, live load, and wind load. Impact factor. Ratio of live load and dead load.

(c) Shallow foundations. Area of foundations. Spread footings. Timber and steel grillage foundation. R.C.C. Raft inverted arches. Foundations under eccentric loads; boundary footings. Depth of foundations.

(d) Preparation of bed : Demolition. Under-pining. Excavation, shoring and timbering of trenches. Bailing-out water.

(e) Deep foundations : Friction and bearings piles; timber, steel and cast iron piles. Screw piles. Precast cast in situ, (vibro Franki) concrete piles. Bored piles. Pressure Piles. Pile driving. Safe load on piles; Hiley's formula.

Plain masonry and brick work, floor and roofs carpentry and joinery, stairs columns, scaffolding hoisting appliances for constructions and maintenance of safety measures.

**Structural plumbing :—**

**Fire proof construction.**—Protection of timber steel and concrete from fire. Storing room construction.

Thermal insulating properties of masonry and concrete walls and plasters. Insulating boards. Thermal insulation of buildings.

Acoustics of buildings. Use of sound-proofing materials.

**Structures.**—Columns under bending and shear due to lateral loads. Caps and footings.

**Fixed and continuous Beams :—**

**Rolling loads.**—Influence lines for Bending moment and shear for beams. Influence lines for stresses in members of framed girders with straight and curved beams and sub-divided panels.

Detailed design of rivetted and welded connections.

Detail design of plate and lattice girders.

**Retaining walls.**—Theories of Earth Pressures; effect of surcharge; stability of retaining walls. Elements of soil mechanics.

Deflection of framed Structures; Williot Mohr diagrams. Stresses in redundant frames.

**Arches.**—Three hinged, two hinged and fixed arches. Influence lines for Bending moment, shear and thrust. Stresses due to loading, temperature and yielding of abutments.

**Suspension Bridges.**—Three hinged and two hinged stiffening girders.

Analysis of simple rigid frames; Method of distribution of moments, and various other methods.

Simple structures such as rectangular and circular water towers; tanks; hemispherical conical and segmental domes; retaining walls with or without counterforts.

**Reinforced concrete construction :—**

**Concrete.**—Various mixes and their uses—reinforcements round bars fabrics. Hybrid etc. Bending and placing reinforcement in slabs, beams, and columns (Rectangular and T. Beams, with single and double reinforcement). Shear and bound stress. Columns under axial and eccentric loads. Simple and combined footings.

**Steel Construction.**—Beams and girders. Properties of British Standard sections; detailed design of beams, compound girders, built up plate girders and lattice girders, limiting spans and economical depths, designs of flanges and webs, curtailment of flange plates determination of size, pitch and arrangement of rivets; types of stiffeners and rulers for their spacing : design of joints and connections; methods of fabrication : detailed design of crane and gantry girders of built-up plate and lattice girder types and typical details of constructions.

**Columns and struts.**—Plain and built up sections; assumptions regarding end conditions; practical formulae for design; detailed designs of stanchions for buildings and of compression members of roof trusses and lattice girders; design and details of caps, bases and brackets for stanchions; joints and splices on stanchions; sizes pitch and arrangements of rivets on flanges of plated stanchions, lacing on stanchions.

**Roof trusses.**—Types of roof trusses; limiting spans rise and camber; economical spacing data for design; detailed design of members including purlins, joints and connections; wind bracing on roof trusses, detailed design of steel framed sheds.

**Bridges :—**

General principles of design—Alignment, number of spans, economic spans water-way calculations, depth of foundation. Scour depth, afflux clearance etc.

**Loading :—**

Dead load, live load, impact factors—loading on road and railway bridges.

**Substructures.**—Abutments, wing walls and piers conditions of stability, types, design and construction—foundations.

**Superstructures.**—Different types of Road and Railway bridges. Choice of material and type. Bridge floors. Wearing surface on bridges. Methods of erection. Maintenance and preservation.

**Culverts.**—Box, pipe and Irish culverts. Cause ways and submersible bridges, general principles of construction.

**Approaches.**—Influence of conditions of approaches on the selection of the type of bridges—Construction of approaches.

## PAPER II

[For Services other than Central Water Engineering (Class I) Service (Civil Engineering Posts).]

**General principles governing the design of Railways, Harbours, Aerodromes and other works.**

**Railways.**—Permanent way—Ballast, sleepers, rail chairs and fastenings.

**Points and crossings.**—Details of construction, different types, turnouts, cross-over formulae and practical rules for settling out.

Plate laying and maintenance of track, super elevation, creep of rails, ruling gradient Compensation, tract resistance tractive effort. Station yards and machinery, station buildings, platforms, sidings, signals and signal mechanism, staff quarters, Engine sheds, turn tables, water columns, aspits etc.

Level crossings in mountain railways.

Tunnels and their alignments and methods of construction.

**Road.**—Classification of roads—Estimation of traffic, availability of materials and choice of type of roads, tests of materials, gradient camber. Road foundation and under-drainage, road surfaces, water bound macadam, tar sprayed macadam, tar macadam hot and cold emulsions, bituminous carpets, stone paving, wood block paving, asphalt roads, plain and reinforced concrete roads. Standard specifications; resist-

ance to motion of vehicles and influence of various roads surface. Machinery employed—latest advances in highway engineering. Road signs and traffic control, Arboriculture.

*Harbours, and other work :—*

Physical geography in relation to docks and harbours : natural phenomena, prevalence and intensity of winds, coastal change; accretion and denudation; effect of artificial interference; tidal phenomena; waves form, height and length, wave velocity and wave action.

Objects of docks and harbours; consideration effecting choice of site; entrances to docks and harbours; foreshore protection and channel regulation; wet, dry and floating docks; tidal basins and harbour, different forms and types, details and methods of construction. Lock gates, their construction and working, machinery employed. Different types of quay walls, their construction and maintenance; signals and lighthouses, ferries and landing piers. Description of important existing docks and harbours. Latest advancement in dock and harbour engineering.

*Aerodromes :—*

Aerodromes, their importance and spacing position and relation to the air zone, Runways, Orientation. Flying Obstructions.

*Economics of aerodrome operation :—*

Location of auxiliary buildings and traffic control in the vicinity of aerodrome and their effect on design. Location and design of terminal buildings. International standards.

[For Central Water Engineering (Class I) Service (Civil Engineering Posts) only.]

Irrigation, General principles governing designs of Dams Barrages, Canals, Canal Structures, Navigation, Locks, Gates and Hoists).

Principal irrigated crops, their seasons and water requirement. Concept of consumptive use. Economic utilisation of water. Methods of irrigation.

Theory of regime flow. Design of lined and unlined canals. Different types of linings. Alignment and construction of canals in cutting and embankment.

Regulation of canals; different types of canal outlets.

Theory of seepage flow. Methods of design of weirs and barrages on permeable foundations. Energy dissipation below weirs and barrages; scour protection measures; river training method, general layout of canal headworks and functions of each component. Silt exclusion and ejection.

Design of falls and regulators. Cross drainage works and their design principles.

General consideration for selection of site for dams. Investigations connected with multipurpose project planning. Types of dams; exploration of foundations; materials for construction. Stability analysis of gravity dams and earth dams. Different types of sluices and spillways. Energy dissipation below spillways. Hydraulic jump as an energy dissipator. Spillway crest gates, their types and methods of operations.

Life irrigation. Discharge of tubewells in confined and unconfined aquifers. Different types of strainers; methods of tubewell construction.

## 11. SURVEYING

*Surveying.*—Construction of Scales. Conventional signs. Use and adjustment of instruments. Theory of levelling, simple, compound check and reciprocal levelling. Various causes of errors in levelling. Elimination of such errors. Customary limits for errors. Method of keeping various styles of fieldbooks. Use of boning rods, Chain survey. Chain and compass survey.

*Theodolite.*—Traversing by Gales traverse system for city and town improvement surveys. Source of errors and required precision in traversing. Traverse tables. Theory and use of the simple plane-table and tangent clinometer, with and without the magnetic compass. Theory and use of the stadia method of plane-tableing, with levelled heights and reductions of distances and heights by slide rule. The three-point problem of plane-tableing by resection from within and without the triangle. Geometrical and trigonometrical proof of the three-point problem. The two-point problem with and without the magnetic compass. Triangulation with reciprocal value; heights of stations; base line measurements. Finding value of position by observations to three known points. Computation by rectangular coordinates with convergency correction.

Contouring the triangulated areas by the heights calculated from the reduced levels. Longitudinal and cross sections run with a level. The location on the map of a road railway canal or weir, etc. The general principles of tunnel alignment and of carrying surface meridians underground for mine-surveys. Discussion on the latest patterns of instruments.

*Practical Astronomy.*—Instruction in spherical trigonometry up to the solution of the spherical triangle and the adoption of Napier's rules of circular parts. Definitions; systems of celestial co-ordinates, the reason for sidereal, sun and mean time; acceleration retardation and equation of time. The Julian and Gregorian calendars; time and the various astronomical corrections.

Finding the meridian of a place by observations to the sun or a star at upper culmination by equal altitudes, by the sun or stars not in the meridian and by circumpolar stars at elongation; and finding time by the sun or stars on the meridian and ex-meridian; finding latitudes by Polaris and circum-meridional observations. Use and constructions of sun dials.

*Railway curves and Alignment.*—Theory of curves, curves laid out with the aid of angular instruments with one theodolite. Curves laid out by linear measurements only. By-chords and off sets (several methods). By off sets inside the Curve with certain ordinates from the long chord. Curve with certain given data to pass through a ruling point. Compound curves. Diversion curve. Vertical curves. Curves spiral or transition line. Setting on pegs for earthwork. Computation of areas of cross sections, etc.

## 12. SANITARY ENGINEERING AND WATER SUPPLY

*General.*—Elementary Bacteriology and Chemistry of water and sewage.

*Water Supply.*—History and development of public water supplies; sources of supply; standards of purity for public water supplies. Quantity supplied per capita intakes. Pumping and gravity schemes. Water towers. Purifications, slow and rapid sand filtration. Sterilisation. Clear water reservoirs. Softening Pipes. Valves and fittings. Distribution of water. Detection and prevention of waste. Metering.

*Sanitation.*—Site and orientation of Buildings. Damp proof courses ventilation. Air conditioning. House drainage. Conservancy and water-borne systems. Sanitary appliances. Constructions and testing of house drains. Pail depots. Public latrines and urinals.

*Prevention of Malaria incidental to engineering construction—*

*Sewerage.*—Separate, combined and partially separate systems. Forms cross-sections, capacities and inclinations of sewers. Construction of sewers. Calculations of storm water. Storm water overflows, syphons. Lifts ejectors and pumps for sewage. Manholes and lamp eyes. Flushing of sewers.

*Sewage disposal.*—Characteristics and composition of sewage, Essentials with regard to sewage treatment. Selections of site for disposal works. Disposal at dilution and treatment. Simple sedimentation and chemical precipitation. Contact beds. Percolating filters. Septic tanks. Imhoff tanks. Activated sludge process. Sludge disposal by various methods.

*Refuse.*—Collection and disposal of refuse.

## 13. ELECTRICAL COMMUNICATION ENGINEERING

### A—TELEGRAPHY

1. *Morse Telegraph Apparatus.*—Description of Signalling, keys, Sounders, Relays, Galvanometers, Balancing boxes Switches, etc., and their use in Morse Telegraphy.

2. *Morse Circuits.*—(a) Arrangements of apparatus and circuit connection for Simple and Differential and Aridge Duplex working terminal and Repeater offices. Single current and Double current working.

(b) General Principle of Quadruplex working.

3. *Multiplex Telegraphy.*—(a) Principle of Multiplex Baudot printing. Telegraph. Different methods of working the Baudot system. Double and quadruple working. Description of principal apparatus used in Baudot. Telegraphy including Retransmitter, Trade Transmitters. Key Board Perforators, etc. and their use.

(b) Teleprinters working. General principle of the "Stop Start" system of working. Teleprinter and its principle of action. General knowledge of its principal parts.

4. Testing of Lines and Cables and details of apparatus employed for such tests.

5. Power arrangements for Telegraph and Telephone offices. Use of Motor Generators, Rectifiers, charging Boards. Primary Cells and Accumulator.

6. Elementary Principles of Construction of Telegraph Lines.—Description of Underground and Underwater Cables. How they are manufactured and laid.

### B—TELEPHONY

1. *Manual System.*—General principles of Magnetic Semi-Central Battery, and Central Battery systems of working. Details of Exchange and Sub-office apparatus, and their circuit diagrams including Private Branch office equipments. Protective devices in Exchange and sub-office and at Cable and line Terminals. Details of Party Line working with Selective ringing.

2. *Automatic System.*—General principle of well known systems of Automatic Exchanges. Schematic Circuit diagrams of principal Exchange equipment. Automatic branch Exchanges. Details of Subscribers' Apparatus for the above systems.

3. *Telephone Transmissions.*—Principles of Transposition of Telephone Circuits. Prevention of Inductive interference on Telephone Circuit. Characteristics of Telephone Circuits. Impedance of Telephone Circuits, and its measurements. Attenuation and Wave-length Constants, Decibel and Neper-Mile Standard Cable. Transmission loss measurement. Wave filter, Carrier Current working. Telephone Repeater.

Thermionic Valves and their use in Telephony.

#### C—RADIO TELEGRAPHY AND TELEPHONY

1. General details of Oscillatory Circuits. Natural Frequency and Wave-length. Logarithmic decrement. Forced Oscillation.

Long Wave and Short Wave Radio working. Points of difference between the two systems.

Various methods of Reception and Transmission of Electromagnetic waves. Different types of detectors and their adjuncts.

Thermionic valves as used on Wireless Telegraphy and Wireless Telephony. Valves as Detectors, Amplifiers, Rectifiers, Modulators and Oscillation Generators. Details of Transmitting and Receiving Circuits. Radiation of Electro Magnetic Waves. Atmospheric effects. Fading. Power plant for Wireless offices. Elementary principle of design of Aerials and Earths for Long and Short Wave systems. Directional Transmission and Reception.

### 14. MECHANICAL ENGINEERING

#### *Theory of Machines and Machine Design*

**Kinematics.**—Method of determining the relative velocities of parts in machines, by calculation and by graphic methods. Velocity and acceleration, diagrams for the ordinary reciprocating engine and for quick return motions. Velocity ratios for toothed gearing including epicyclic gears. Velocity and acceleration in cam gears.

**Kinetics.**—Balancing of motors and of reciprocating engines. Crank effort diagram of engines and speed variation of flywheels. Governors. Simple causes of vibration problems. Whirling of shafts and torsional oscillations.

**Friction.**—Power transmitted or absorbed by belt drives and brakes. Friction in gearings. Friction and lubrication of journal and thrust bearings, ball and roller bearings. Screw gears.

Design of fastenings and Machine Parts. Proportions for rivetted, bolted and welded joints and fastenings, pipe connections—Crank, rods and levers, valves, pipes and cylinders, bearings, coupling, shafts and keyways. Tooth profile.

#### *Properties and Strength of Materials*

Stress and strain tension, compression, and shear.

Hooke's law. Relations between elastic constants.

Simple cases of combined stress in two dimensions. Circle diagram.

Compound bars in tension and compression. Elementary consideration of stress due to temperature changes.

Rivetted and welded joints.

Thin cylindrical and spherical shells under internal pressure.

Stresses in thick-walled cylinders under internal and external pressure.

Bending moments and shearing forces.

Simple theory of beams.

Slope and deflection of cantilevers and freely supported beams for simple cases of loading.

Torsion of round bars. Transmission of power by shafts.

Simple cases of combined bending and direct stress, and combined bending and torsion.

Work done in elastic deformation. Strain energy. Stresses due to suddenly applied loads.

Laminated springs and close coiled helical springs.

Elementary theory of strut with use of empirical formulae.

The mechanical properties of materials. Composition and properties of the important metals used by engineers. Effects of heat treatment, annealing, and normalising. The effect of cold work on the properties of metals. Elasticity, plasticity, ductility, tenacity, hardness, resistance to shock, resistance to repeated and alternating stress. Creep and elevated temperatures. Common types of machine and instruments for the investigation of mechanical properties. Forms of specimen, procedure in carrying out tests, and methods of expressing results.

#### Heat Engines

Physical properties of steam; steam tables and their use. Fundamental laws of thermodynamics. Reversible and irreversible process. Ideal and actual cycles. Construction and use of temperature-entropy and heat-entropy charts.

Behaviour of steam in engine cylinders. Jacketing Superheating. Compounding Horse Power and steam consumption.

Testing of engines, Indicators and indicator diagrams. Combination of indicator diagrams for multiple expansion engines. Brake and Brake horse-power. Mechanical and thermal efficiencies. Steam consumption and heat balance for steam plants. The steam turbine. Steam flow in nozzles and blading. Calculations relating to blading and horse-power. Steam

cycles in modern power plants. Regenerative feed heating and steam reheating cycles. Condensing plants; Jet and surface condensers. Air pumps, Air ejectors. Condensate extraction pumps. Fuels. Combustion: air supply and regulation. Analysis of fluid gases. Boilers, Super-heaters, Economisers. Air preheaters. Furnaces. Boiler trials. Valve Valve gear and valve diagrams. Governing. Crank effort diagrams. Flywheels. Balancing of engines.

The laws of perfect gases. Expansion and compression. Ideal cycles applicable to the internal combustion engine, and their representation by pressure volume and entropy temperature diagrams. Air standard efficiencies. Comparison of actual and ideal efficiency.

General properties of liquid and gaseous fuel. Calorific value and its determination. Combustion. Calculation of air-fuel ratios. Use of exhaust gas analysis. Volumetric efficiency. Gas producer.

The classification and cycles of operation of gas engines, petrol engines and heavy oil engines. Character of combustion processes.

The general construction of internal combustion engines. Carburettors. Electrical ignition systems. Fuel pumps and injection systems. Governors and fuel control. Supercharges.

The mechanics of internal combustion engine-speed fluctuation. Balancing.

The testing of internal combustion engines. Apparatus and procedure. Indicators. Characteristics of Indicator diagrams. Fuel consumption and heat distribution. Engine losses. The representation and interpretation of test results.

#### *Hydraulic and Hydraulic Machinery*

Pressure of water at a point. Centre of pressure. Pressure on a surface. Flow of water, through orifices, notches, and weirs. Laws of Fluid friction. Steady flow in pipes and uniform channels. General phenomena of flow in rivers. Gauging of flow in pipes and open channels. Dynamical similarity. Impact of jets on plane. Types of turbines. General principles of design of turbines. Governing of turbines; types of pumping machinery. General principles of design of centrifugal pumps. Hydraulic cranes and hoists. Hydraulic transmission gear. General principles of hydraulic transmission of power.

### 15. ARCHITECTURE AND TOWN PLANNING

#### A. ARCHITECTURE

##### 1. *History of Architecture*—

Western: The chief periods and styles from ancient Greek to modern.

Indian: Buddhist, Early Hindu, Muslim and Modern.

##### 2. *Theory of Architecture*—

General principles, Elements of composition, Accommodation and circulation. Balance and proportion. Function. Harmony and Contract Style.

##### 3. *Architectural Construction*—

Drainage. Foundations. Materials. Walls. Roofing beams, arches and vaults—minor, elements-decoration. Plumbing, heating, ventilating, lighting, acoustics, sanitation, colour.

##### 4. *Quantities, Estimates, Contracts, Laws*—

#### B. TOWN PLANNING

1. *History of Town Planning*.—Ancient, medieval and modern. Effects of social changes.

2. *Practice*.—Surveys, General Principles, sites, climate, water supply, drainage, transport, Zoning focal centres and their distribution. Highways, Public service and amenities. Uniformity and variety.

3. *Laws*.—Authorities—Contracts, local special Bye-laws. Acquisition of land.

### 16. THEORY OF MACHINES AND MACHINE DESIGN

**Kinematics.**—Methods of determining the relative velocities of parts in machine, by calculation and by graphic methods. Simple cases of acceleration diagrams.

**Cams.**—Harmonic, constant-velocity and constant acceleration types; displacement, velocity and acceleration of follower.

**Gears Gearing.**—Theory of shape and action of teeth; simple, compound and epicyclic trains. Worm gears. Strength and durability of teeth. Engine turning moment diagrams; flywheels, governors.

**Balancing.**—Rotating parts, primary balancing of reciprocating parts, including locomotive balancing and secondary balancing of 'in line' engines.

**Vibrations.**—Body with single degree of freedom; torsional oscillations of shafts with attached masses. Whirling of shafts.



**Gyroscope.**—Theory and action. Tractive effort and performance curves for vehicles. Friction and Lubrication. Dry friction; friction circle, friction clutches, screws, collar friction. Belt and rope drives.

Analysis of forces in simple mechanisms. Design of parts subjected to pure bending or pure torsion e.g. pin connections; levers; shafting, springs. Simple clutches and flexible joints in shafting.

Design of parts subjected to combined bending, torsion and direct stress, e.g., cranked members; eccentrically loaded connections (bolted and rivetted).

Design involving applications of kinematics e.g. gears and bear wheels; nut and screw mechanisms; cams; lubrication; design of bearings for given loads; use of ball and roller journal and thrust bearings; influence on design of fatigue and stress concentrations.

Design of belts, ropes, pulleys, flywheels, thin and thick pipes.

NOTE.—Candidates will be expected to show competency in making dimensioned hand sketches in good proportion. Drawing instruments may be used.

## 17. METALLURGY

Elementary consideration of the structure of metals. Crystals, grains, grain boundaries; Construction and interpretation of thermal equilibrium diagrams.

Structure of alloys; eutectics; solid solutions, intermetallic compounds—critical points in straight carbon steel.

Mechanical properties and their assessment. Standard methods of testing elementary effects of mechanical work on structure and physical properties. Fatigue. Creep. Corrosion Plastic properties.

### Iron and Steel—

Methods of manufacture; brief outline of pig iron manufacture. The different types of pig iron and their uses; hematitic, basic foundry cold-blast. Wrought iron. Steel-making regarded as a chemical process. Outline of crucible, Bessemer, openhearth, and electrical furnace practice. Relationship between process and manufacture and specific properties.

Effects of common elements of carbon steel. British Standard Specification for plain carbon steel. Structure of steel ingots as cast. Effects of hot and cold deformation on the structure and mechanical properties of steel. Effects of alloy elements. The common alloy steels. High-speed steels. Classification of straight-carbon and alloy steels according to their uses.

**Cast iron.**—Malleable cast iron. Moulding Influence of design and section thickness on the structure of iron and steel castings.

Machinability of ferrous metals as affected by composition and treatment.

### Non-ferrous metals—

A study of the uses, physical, and mechanical properties of the principal non-ferrous alloys of industrial importance, with special reference to standard specifications. Hot and cold working. Alloys suitable for diecasting. Bearing Metals. Relationship between structure and duty.

### Heat Treatment of Metals.

General industrial pyrometry.

Normalizing, annealing, quenching, and tempering of plain carbon steels—effects of microstructure and mechanical properties. Case-hardening and nitriding. Temper-brittleness mass effect, strain-ageing.

Grain, growth and recrystallisation ageing.

Heat-treatment plan and equipment.

### Technology of Working Processes—

(a) Hot stamping and forging. Variation in procedure for different materials. Effect on physical properties and structure. Flow of metal during process. Correct and incorrect fibre direction; evidence of macro-section.

(b) Press work. Suitability of materials. Drawing operations of varying depths and metal flow. Interstage annealing. Material inspection at various stages.

(c) Welding. The effect of electric arc and oxyacetylene processes on materials. Electrodes and fluxes. Structure of welds. Inspection of welds.

(d) Extrusion. Materials available. Type of work possible.

## 18. WORKSHOP TECHNOLOGY

**Material.**—The composition, physical property and engineering uses of the more common metals, their alloys such as cast iron, malleable iron, mild steel, medium carbon steel, phosphor, bronze and light alloys etc.

Tools steels, carbon and high-speed steel, and their suitability for different kinds of tools.

**Heat-Treatment.**—The relation, between the heat-treatment and the physical property of plain carbon steels.

**The effect of Carbon.**—Critical temperatures. Hardening, tempering, annealing, normalizing and case hardening. Types of furnaces. Temperature measurement and Castrol Quenching media.

**Manufacturing Process.**—An outline of the preparatory processes for forming materials e.g. moulding and casting forgings, drop stamping, rolling and drawing metal bars. Dishing, drawing, pressing and extruding; brazing and soldering welding by Arc, and welding and cutting by acetylene gas blow pipe flame.

**Measuring, Gauging and Inspection.**—General Principle of interchangeable production and limit gauging.

**Standards.**—Systems of limits and fits for plain and screwed work. Tolerances limits; clearance, interference. Tolerances associated with different machining operations.

**Type of Limit Gauges.**—Advantages of adjustable gauges.

**Measuring equipment.**—Use of surface of plates, squares, micrometers, vernier calipers and height gauges, dial gauges, rules protractors. Conversion factor. Standard workshop gauges, their accuracies and uses.

**Cutting Tools.**—Cutting action of tools such as hand tools, lathe tools, drills reamers, milling cutters, dies, taps etc. Angles of tools for cutting different materials and purposes. Measurement of tool angles. Cutting speeds and feeds. Estimating machining times.

**Machine Tools.**—Fundamental principles in the production of machine surfaces. Principal features of construction and function of general purpose machines such as lathes, sensitive drills, radial and vertical drilling machines, shaping, slotting, planning and boring machines; plan milling machines, capstan and turret lathes, grinding and lapping machines.

**Lubrication.**—Types and uses of cutting solutions. Selection and methods of application.

**Operation Planning.**—Planning the operation layout for production and estimation of floor to floor times for machined parts.

## 19. WORKSHOP ORGANISATION AND MANAGEMENT

**Factory Organisation.**—Essentials for a sound system of works organisation. Division of managerial duties. Cost Section. Administrative Division. Technical Division. Works Manager's departments.

**Place of the Foreman in Works Organisation.**—Choice of Foreman; duties of foreman; maintenance of discipline, supervision and instructions. Attitude towards workers, care of materials, tools and equipment, analytical study of machines, men and methods; records maintenance; bonus to foreman.

**Workers and working conditions.**—The problem of incentives, fair and adequate wages, satisfactory working conditions, fair and sympathetic treatment. Suggestions from employees: day wage system; piece work system; premium or bonus system; profit sharing scheme; what is a fair day's wage; higher wages must result in greater output. Problem of factory discipline; proper time keeping; check on absenteeism; check on loitering. Workers rules and regulations. Efficiency records. Works Committee. Duties and responsibilities of employers and labour. Labour relations.

**Stores Organisation.**—Functions of the Stores Department. Efficient handling and control of stores. Material issue requisitions; record of material issued. Bin cards; Stores record cards; Duties of Stores Accountants; materials returned from job. Advantages of good store keeping and store recording.

**Labour Organisation.**—Training of employees; recording of time and performance; time recording metal discs; mechanical time recorder; job cards, piece work cards; piece work rules; overtime slips; pass out slips; preparation of wages sheets and payment of wages for overtime; transfer from one department to another; fines; Works Committees.

**Method of remunerating Labour.**—Time and day rate system; piece work method; combination of day rate and piece work; bonus methods; high wage plan; collective bonus plans profit sharing scheme; essential factors for wages as an incentive to efficiency.

**Production Organisation.**—The Works Planning Department and Progress Department; estimating department; inspection departments and duties of inspection department. Budget control; statistical reports; standardisation and mass production internal transport; tool service, maintenance service, drawing and design service.

**Labour Welfare.**—Labour welfare activities; hours of work and adequate wages; accident, safety protections; shops cleanliness and sanitation; lighting and ventilation; factory discontent; transport to and from factory; educational facilities; canteen and mess facilities; medical aid; amenities for sports and games; works library.

### Maintenance of rigid discipline—

**Cost Accounting and Cost Control.**—Main elements of costs; material and labour expenses; items usually included in work on cost; office on cost; duties of the cost office; ascertaining of prime cost of articles; methods of record and internal

check, work orders; stock orders; pending orders, charging direct material cost; materials issue requisitions; return of materials to stores; transfer of materials from one job to another; material issue, wages etc.; detailed consideration of on cost items. Allocation and distribution of expenses; method of recording works expenses in cost and cost records.

## 20. APPLIED ELECTRONIC CIRCUITS

Circuit principles involved in the following :—

Vacuum tube amplifiers, typical circuits for different applications; feed back; broadband amplifiers; D.C. amplifiers.

Transistor amplifiers, typical circuits; design for temperature stabilisation.

Low and high frequency oscillators. Conventional circuits, relaxation oscillators; frequency multipliers and dividers; frequency stabilization.

Pulse and sweep circuits, counting circuits.

Modulators and detectors; typical circuits for amplitude, frequency and phase modulation.

Power supply systems for electronic equipments—rectifiers, filters, voltage regulated power supplies.

Industrial electronic circuits for induction heating, welding and speed control of electric meters.

Typical circuits used in television receivers.

## 21. HYDROLOGY

*General.*—Hydrologic cycle, scope and application of Hydrology.

*Precipitation.*—Measurement of precipitation; precipitation gauge network.

*Streamflow.*—Water stage measurement, discharge observations, stage-discharge relation, analysis of stream flow data, adjustment of stream flow data.

*Evaporation and Transpiration.*—Factors affecting evaporation, evaporation control.

*Groundwater.*—Movement of ground water, hydraulics of wells, ground water yield; replenishment and drainage.

*Hydrograph analysis.*—Components of the hydrograph, shape of the hydrograph.

*Rainfall.*—Run-off relationship, seasonal and annual relationship, extrapolation of run-off from rainfall data.

*Estimation of floods.*—Estimation of peak flows by empirical formulae, by unit hydrograph, curves and other frequency methods.

*Sedimentation.*—Elementary knowledge of bed-load and suspended load equations; principles of computing total transport rate; measurement of sediment; sedimentation of reservoirs.

## 22. GENERATION, TRANSMISSION AND DISTRIBUTION OF POWER

### Generation

Sources of energy: coal, oil, gas, atomic fuel and water at high level. Availability and relative cost of generation in India.

Choice, location, type and layout of Hydroelectric power plant and steam turbine power plant. Fundamental Principles of Nuclear Power Generation. Comparative data and special features of various types of power plant. Layout and essential connections of generators, transformers, main and sectional busbars, disconnectors and circuit-breakers in generating stations and sub-stations. Construction and action of modern high voltage circuit-breakers. Parallel operation of alternators and inter-connected stations. Synchronisers. Different methods of grounding the neutral in power stations. Voltage frequency and power factor control. Use of reactors and the calculation of short-circuit K.V.A. due to balanced and unbalanced faults. Protection of generators and transformers. Steady state stability of power system and elements of transient stability.

### Transmission

The construction, erection, testing and maintenance of transmission lines. Calculation of constants and voltage regulation of overhead lines. Under-ground Cables: construction; capacitance of, and electrostatic stresses in, concentric cables and h.v. bushings. Calculation of charging current in lines and cables; abnormal voltage rises, surges; corona. Different types of insulators, voltage distribution in insulator strings. Protection against voltage surges and automatic protective systems for ring mains and duplicate feeders including modern systems of protection for long lines. Use of reactors and condensers. Principles of grounding/Mechanical design of overhead lines.

### Distribution

Calculations relating to feeder, distributor and service mains. Relative weights of copper for different types of d.c. and a.c. distribution systems. Characteristics and control of synchronous converters and rectifiers; sub-station layout. Laying, testing, maintenance and fault location in networks. Voltage and power factor adjustment methods.

## APPENDIX III

### REGULATIONS RELATING TO THE PHYSICAL EXAMINATION OF CANDIDATE

(These regulations are published for the convenience of candidates and in order to enable them to ascertain the probability of their coming up to the required physical standard. But it must be clearly understood that the Government of India reserve to themselves an absolute discretion to reject as unfit any candidate whom they may consider, on the report of the Medical Board, to be physically disqualified and that their discretion is in no respect limited by these regulations. These regulations are intended merely for the guidance of Medical Examiners and are not meant to restrict their discretion in any way).

1. To be passed as fit for appointment a candidate must be in good mental and bodily health and free from any physical defect likely to interfere with the efficient performance of the duties of his appointment.

2. (a) In the matter of the correlation of age, height and chest girth of candidates of Indian (including Anglo-Indian) race, it is left to Medical Board, to use whatever correlation figures are considered most suitable as a guide in the examination of the candidates. If there be any disproportion with regard to height, weight and chest girth, the candidate should be hospitalised for investigation and X-Ray of the chest taken before the candidate is declared fit or not fit by the Board.

(b) However, for certain Services the minimum standards for height and chest girth, without which candidates cannot be accepted, are as follows :—

	Height	Chest girth (fully expanded)	Expansion
Railway Engineering Service, Civil Electrical, Mechanical and Signal	152 cm.	84 cm.	5 cm.

The minimum height prescribed is relaxable in case of candidates belonging to races such as Gorkhas, Garhwalis, Assamese, Tribals, etc., whose average height is distinctly lower.

(c) For the Military Engineer Services, Class I and the Indian Ordnance Factories Service, Class I, a minimum expansion of 5 centimetres will be required in the matter of measurement of the chest.

3. The candidate's height will be measured as follows :—

He will remove his shoes and be placed against the standard with his feet together and the weight thrown on the heels and not on the toes or other sides of the feet. He will stand erect without rigidity and with the heels, calves, buttocks and shoulders touching the standard; the chin will be depressed to bring the vertex of the head level under the horizontal bar and the height will be recorded in centimetres and parts of a centimetre to halves.

4. The candidate's chest will be measured as follows :—

He will be made to stand erect with his feet together and to raise his arms over his head. The tape will be so adjusted round the chest that its upper edge touches the inferior angles of the shoulder blades behind and lies in the same horizontal plane when the tape is taken round the chest. The arms will then be lowered to hang loosely by the side, and care will be taken that the shoulders are not thrown upwards or backwards so as to displace the tape. The candidate will then be directed to take a deep inspiration several times and the maximum expansion of the chest will be carefully noted, and the minimum and maximum will then be recorded in centimetres, 84—89, 86—93.5 etc. In recording the measurements, fractions of less than half a centimetre should not be noted.

5. The candidate will also be weighed and his weight recorded in kilograms; fractions of half a kilogram should not be noted.

6. The candidate's eye-sight will be tested in accordance with the following rules. The result of each test will be recorded :—

(i) *General.*—The candidate's eyes will be submitted to a general examination directed to the detection of any disease or abnormality. The candidate will be rejected if he suffers from any squint or morbid conditions of eyes, eye-lids or contiguous structures of such a sort as to render or are likely at future date to render him unfit for service.

(ii) *Visual Acuity.*—The examination for determining the acuteness of vision includes two tests, one for distant, the other for near vision. Each eye will be examined separately.

There shall be no limit for minimum naked eye vision but the naked eye vision of the candidates shall, however, be recorded by the Medical Board or other medical authority in

every case, as it will furnish the basic information in regard to the condition of the eye.

The standards for distant and near vision with or without glasses shall be as follows :—

	Distant vision		Near vision	
	Better eye	Worse eye	Better eye	Worse eye
1. Railway Engineering Service, (Civil, Electrical Mechanical and Signal) and other services.	6/9	6/9 or 6/12	0.6	0.8
2. Central Engineering Services Class I & II, Central Electrical Engineering Services, Class I and Class II, Central Engineering Service (Roads), Class I, Indian Inspection Service, Class I, Indian Supply Service, Class I, Central Water Engineering (Class I) Service and Central Power Engineering (Class I) Service.	6/9	6/9 or 6/12	0.6	0.8
3. Military Engineer Services, Class I and Indian Ordnance Factories Service, Class I	6/6	6/18 (Corrected with glasses)	0.8	1.0
4. Telegraph Engineering Service (Class I), Stores Department of the Superior Revenue Establishment of Indian Railways.	6.9	6.9 or 6/6	0.6	0.8

NOTE (1).—In respect of Services mentioned at 1, 2 and 3 above Total amount of Myopia (including the cylinder) shall not exceed—4.00D. Total amount of Hypermetropia (including the cylinder) shall not exceed +4.00D.

NOTE (2).—In respect of Services mentioned at 4 above.

(a) For candidates up to the age of 20 years.—Total amount of Myopia shall not exceed —6.00D. Total amount of hypermetropia shall not exceed +6.00D.

(b) For candidates above the age of 20 years.—Total amount of Myopia shall not exceed —8.00D. Total hypermetropia shall not exceed +6.00D.

NOTE (3).—Fundus Examination.—Wherever possible fundus examination will be carried out at the discretion of the Medical Board and results recorded.

NOTE (4).—Colour Vision.—(i) The testing of colour vision shall be essential in respect of Services mentioned at 1, 2 and 3 above.

(ii) Colour perception should be graded into a higher and a lower grade depending upon the size of the aperture in the lantern as described in the table below :—

Grade	Higher Grade of colour perception	Lower Grade of Colour perception
1. Distance between the lamp and candidates	4.9 metres	4.9 metres
2. Size of aperture	1.3 mm	13 mm
3. Time of exposure	5 sec.	5 sec.

For the Services concerned with the safety of the Public, e.g. pilots, drivers, guards, etc., the higher grade of colour vision is essential but for other the lower grade of colour vision should be considered sufficient. The same standards of colour vision should be applicable in respect of all Engineering personnel in whose case colour perception is considered essential irrespective of the fact whether their duties involve field work or not.

(iii) Satisfactory colour vision constitutes recognition with ease and without hesitation of signal red, signal green and white colours. The use of Ishihara's plates, shown in good light and a suitable lantern like Edrige Green's shall be considered quite dependable for testing colour vision. While either of the two tests may ordinarily be considered sufficient, in respect of the Services concerned with road, rail and air traffic, it is essential to carry out the lantern test. In doubtful cases where a candidate fails to qualify when tested by only one of the two tests, both the tests should be employed.

NOTE (5).—Field of vision.—The field of vision shall be tested in respect of all Services by the confrontation method. Where such test gives unsatisfactory or doubtful results the field of vision should be determined on the perimeter.

NOTE (6).—Night Blindness.—Night blindness need not be tested as a routine but only in special cases. No standard test for the testing of night blindness or dark adaptation is prescribed. The Medical Board should be given the discretion to improvise such rough tests e.g. recording of visual acuity with reduced illumination or by making the candidate recognise various objects in a darkened room after he/she has been there for 20 to 30 minutes. Candidates' own statements should not always be relied upon, but they should be given due consideration.

NOTE (7).—Ocular conditions other than visual acuity.—(a) Any organic disease or a progressive refractive error which is likely to result in lowering the visual acuity should be considered as a disqualification.

(b) Trachoma.—Trachoma, unless complicated shall not ordinarily be a cause for disqualification.

(c) Squint.—For Services mentioned at 1, 2 and 3 above where the presence of binocular vision is essential, squint, even if the visual acuity is of the prescribed standard should be considered as a disqualification. For other Services the presence of squint should not be considered as a disqualification if the visual acuity is of the prescribed standard.

(d) One-eyed person.—The employment of one-eyed individuals is not recommended.

#### 7. Blood Pressure.

The Board will use its discretion regarding Blood Pressure. A rough method of calculating normal maximum systolic pressure is as follows :—

(i) With young subjects 15—25 years of age the average is about 100 plus the age.

(ii) With subjects over 25 years of age the general rule of 110 plus half the age seems quite satisfactory.

N.B.—As a general rule any systolic pressure over 140 and diastolic over 90 should be regarded as suspicious and the candidate should be hospitalised by the Board before giving their final opinion regarding the candidate's fitness or otherwise. The hospitalization report should indicate whether the rise in blood pressure is of a transient nature due to excitement etc., or whether it is due to any organic disease. In all such cases X-Ray and electrocardiographic examinations of heart and blood urea clearance test should also be done as a routine. The final decision as to the fitness or otherwise of a candidate will, however, rest with the Medical Board only.

#### Method of taking Blood Pressure

The mercury manometer type of instrument should be used as a rule. The measurement should not be taken within fifteen minutes of any exercise or excitement. Provided the patient and particularly his arm is relaxed, he may be either lying or sitting. The arm is supported comfortably at the patient's side in a more or less horizontal position. The arm should be freed from clothes to the shoulder. The cuff completely deflated, should be applied with the middle of the rubber over the inner side of the arm, and its lower edge an inch or two above the bend of the elbow. The following turns of cloth bandage should spread evenly over the bag to avoid bulging during inflation.

The brachial artery is located by palpitation at the bend of the elbow and the stethoscope is then applied lightly and centrally over it below, but not in contact with the cuff. The cuff is inflated to about 200 mm. Hg. and then slowly deflated. The level at which the column stands when soft successive sounds are heard represents the Systolic Pressure. When more air is allowed to escape the sounds will be heard to increase in intensity. The level at which the well-heard clear sounds change to soft muffled fading sounds represents the diastolic pressure. The measurements should be taken in a fairly brief period of time as prolonged pressure of the cuff is irritating to the patient and will vitiate the readings. Rechecking if necessary, should be done only a few minutes after complete deflation of the cuff. (Sometimes, as the cuff is deflated sounds are heard at a certain level; they may disappear as pressure falls and reappear at a still lower level. This 'Silent Gap' may cause error in reading).

8. The urine (passed in the presence of the examiner) should be examined and the result recorded. Where a Medical Board finds sugar present in a candidate's urine by the usual chemical tests, the Board will proceed with the examination with all its other aspects and will also specially note any signs or symptoms suggestive of diabetes. If, except for the glycosuria the Board finds the candidate conforms to the standard of medical fitness required they may pass the candidate "fit subject to the Glycosuria being non-diabetic" and the Board will refer the case to a specified specialist in Medicine who has hospital and laboratory facilities at his disposal. The Medical Specialist will carry out whatever examinations, clinical and laboratory, he considers necessary including a standard blood sugar tolerance test and will submit his opinion to the Medical Board, upon which the Medical Board will base its final opinion "fit" or "unfit". The candidate will not be required to appear in person before the Board on



the second occasion. To exclude the effects of medication it may be necessary to retain a candidate for several days in hospital, under strict supervision.

9. The following additional points should be observed :—

- (a) that the candidate's hearing in each ear is good and that there is no sign of disease of the ear. In case it is defective the candidate should be got examined by the ear specialist. Provided that if the defect in hearing is remediable by operation or by use of a hearing aid, a candidate cannot be declared unfit on that account provided he/she has no progressive disease in the ear. This provision is not applicable in the case of Railway Services;
- (b) that his/her speech is without impediment;
- (c) that his/her teeth are in good order and that he/she is provided with dentures where necessary for effective mastication (well filled teeth will be considered as sound);
- (d) that the chest is well formed and his chest expansion sufficient; and that his heart and lungs are sound;
- (e) that there is no evidence of any abdominal disease;
- (f) that he is not ruptured;
- (g) that he does not suffer from hydrocele, a severe degree of varicocoele, varicose veins or piles;
- (h) that his limbs, hands and feet are well formed and developed and that there is free and perfect motion of all his joints;
- (i) that he does not suffer from any inveterate skin disease;
- (j) that there is no congenital malformation or defect;
- (k) that he does not bear traces of acute or chronic disease pointing to an impaired constitution;
- (l) that he bears marks of efficient vaccination; and
- (m) that he is free from communicable disease.

10. Radiographic examination of the chest should be done as a routine in all cases for detecting any abnormality of the heart and lungs which may not be apparent by ordinary physical examination.

When any defect is found it must be noted in the Certificate and the medical examiner should state his opinion whether or not it is likely to interfere with the efficient performance of the duties which will be required of the candidate.

NOTE.—Candidates are warned that there is no right of appeal from a Medical Board, special or standing appointed to determine their fitness for the above Services. If, however, Government are satisfied on the evidence produced before them of the possibility of an error of judgment in the decision of the first Board, it is open to Government to allow an appeal to a second Board. Such evidence should be submitted within one month of the date of the communication in which the decision of the first Medical Board is communicated to the candidate, otherwise no request for an appeal to a second Medical Board will be considered.

If any medical certificate is produced by a candidate as a piece of evidence about the possibility of an error of judgment in the decision of the first Board the certificate will not be taken into consideration unless it contains a note by the medical practitioner concerned to the effect that it has been given in full knowledge of the fact that the candidate has already been rejected as unfit for service by the Medical Board.

#### Medical Board Report

The following intimation is made for the guidance of the Medical Examiner :—

1. The standard of physical fitness to be adopted should make due allowance for the age and length of service, if any, of the candidate concerned.

No person will be deemed qualified for admission to the Public Service who shall not satisfy Government, or the appointing authority, as the case may be, that he has no disease, constitutional affection or bodily infirmity unfitting him, or likely to unfit him for that service.

It should be understood that the question of fitness involves the future as well as the present and that one of the main objects of medical examination is to secure continuous effective service, and in the case of candidates for permanent appointment to prevent early pension or payments in case of premature death. It is at the same time to be noted that the question is one of the likelihood of continuous effective service, and that rejection of a candidate need not be advised on account of the presence of a defect which is only a small proportion of cases is found to interfere with continuous effective service.

A lady doctor will be co-opted as a member of the Medical Board whenever a woman candidate is to be examined.

The report of the Medical Board should be treated as confidential.

In cases where a candidate is declared unfit for appointment in the Government service, the grounds for rejection may be communicated to the candidates in broad terms without giving minute details regarding the defects pointed out by the Medical Board.

In cases where a Medical Board considers that a minor disability disqualifying a candidate for Government service can be cured by treatment (medical or surgical) a statement to that effect should be recorded by the Medical Board. There is no objection to a candidate being informed of the Board's opinion to this effect by the appointing authority and when a cure has been effected it will be open to the authority concerned to ask for another Medical Board.

#### (a) Candidate's statement and declaration

The candidate must make the Statement required below prior to his Medical Examination and must sign the Declaration appended thereto. His attention is specially directed to the warning contained in the Note below :—

1. State your name in full (in block letters).....

2. State your age and birth place .....

3. (a) Have you ever had small-pox, intermittent or any other fever, enlargement or suppuration of glands, spitting of bloods, asthma, heart disease, lung disease, fainting attacks, rheumatism, appendicitis.

(b) Any other disease or accident requiring confinement to bed and medical or surgical treatment ?

4. When were you last vaccinated ?.....

5. Have you or any of your near relation been afflicted with consumption, scrofula, gout, asthma, fits, epilepsy, or insanity ?

6. Have you suffered from any form of nervousness due to over-work or any other cause ?.....

7. Furnish the following particulars concerning your family :—

Father's age if living and state of health	Father's age at death and cause of death	No. of brothers living their ages and state of health	No. of brothers dead their ages at and cause of death
(1)	(2)	(3)	(4)

Mother's age if living and state of health	Mother's age at death and cause of death	No. of sisters living their ages and state of health	No. of sisters dead, their ages at and cause of death
--	--	--	---

8. Have you been examined by a Medical Board before ?  
 9. If answer to the above is yes, please state what Service/ Services you were examined for ?  
 10. Who was the examining authority ?  
 11. When and where was the Medical Board held ?

12. Result of the Medical Board's examination, if communicated to you or if known i.e., whether declared fit or unfit

I declare all the above answers to be, to the best of my belief, true and correct.

Candidate's Signature.....

Signed in my presence.

Signature of Chairman of the Board.

NOTE.—The candidate will be held responsible for the accuracy of the above statement. By wilfully suppressing any information he will incur the risk of losing the appointment and, if appointed, of forfeiting all claim to Superannuation Allowance or Gratuity.

(b) Report of the Medical Board on (name of candidate) Physical examination.

1. General development : Good.....Fair.....  
 Poor.....Nutrition : Thin.....Average.....  
 Obese.....Height (without shoes).....  
 Weight.....Best Weight.....When ?.....Any  
 recent change in weight.....Temperature.....  
 Girth of Chest :—

(1) (After full inspiration)

(2) (After full expiration)

2. Skin : Any obvious disease.....

3. Eyes : (1) Any disease.....

(2) Night blindness.....

(3) Defect in colour vision.....

(4) Field of vision.....

(5) Visual acuity.....

Acuity of vision	Naked eye	Strength of glasses			
		With glasses	Sph.	Cyl.	Axis
Distant Vision R.E. L.E.					
Near Vision R.E. L.E.					
Hypermetropia R.E. (Manifest) L.E.					

4. Ears : Inspection.....Hearing. Right Ear  
 Left Ear.....

5. Glands.....Thyroid.....

6. Condition of teeth.....

7. Respiratory System : Does physical examination reveal anything abnormal in the respiratory organs.....  
 .....  
 .....  
 If yes, explain fully.....  
 8. Circulatory System :  
 (a) Heart : Any organic lesions ?  
 Rate.....Standing.....  
 After hopping 25 times.....  
 Two minutes after hopping.....  
 (b) Blood Pressure : Systolic.....  
 Diastolic.....

9. Abdomen : Girth.....Tenderness  
 Hernia.....

(a) Palpable : Liver.....Spleen.....

Kidneys.....Tumours.....

(b) Haemorrhoids.....Fistula.....

10. Nervous System : Indications of nervous or mental disabilities.....

11. Loco-Motor System : Any abnormality.....

12. Genito Urinary System : Any evidence of Hydrocele, Varicocele, etc., Urine Analysis :

(a) Physical appearance.....(b) Sp. Gr.....

(c) Albumen.....(d) Sugar.....

(e) Casts.....(f) Cells.....

13. Report of X-Ray Examination of Chest.....

14. Is there anything in the health of the candidate likely to render him unfit for the efficient discharge of his duties in the service for which he is a candidate ?

15. For which Services has the candidate been examined and found in all respects qualified for the efficient and continuous discharge of his duties and for which of them is he considered unfit ?

16. Is the candidate fit for Field Service ?

NOTE.—The Board should record their findings under one of the following three categories :

(i) Fit

(ii) Unfit on account of.....

(iii) Temporarily unfit on account of.....

President.....

Member.....

Place.....

Date.....

#### APPENDIX IV

Brief particulars relating to the Services/Posts, to which recruitment is being made on the results of this examination

1. Indian Railway Service of Engineers, the Electrical Engineering Department of the Superior Revenue Establishment of the Indian Railways, the Signal Engineering Department of the Superior Revenue Establishment of the Indian Railways and the Mechanical Engineering and Transportation (Power) Department of the Superior Revenue Establishment of the Indian Railways.

(1) Appointments will be on probation for a period of three years during which the service of the officers will be liable to termination by three months' notice on either side. Probationary Officers will be required to undergo practical training for the first two years. Those who complete this training successfully and are otherwise considered suitable will be placed in charge of a working post, provided they have passed the prescribed departmental and other examinations. It must be noted that these examinations should, as a rule, be passed at the first chance and that save under exceptional circumstances, a second chance will not be allowed. Failure to pass any of the examinations may result in the termination of the service and will in any case involve stoppage of increments.

At the end of one year in a working post, the probationary officers will be required to pass a final examination, both practical and theoretical and will, as a rule, be confirmed if they are considered fit for appointment in all respects. In cases where the probationary period is extended for any reason, the drawal of the first and subsequent increments on their passing the departmental examinations, and on being confirmed, will be subject to the rules and orders in force from time to time.

On appointment a probationer shall execute an agreement binding himself and one surety jointly and severally to refund in the event of his failing to complete the probation to the satisfaction of the Central Government any moneys paid to him consequent on his appointment as Probationer.

If for any reasons not beyond his control, a probationer wishes to withdraw from training or probation, he will be liable to refund the whole cost of his training and any other moneys paid to him during the period of his probation.

NOTE (i).—The period of training and the period of probation against a working post may be modified at the discretion of Government. If the period of training is extended in any case due to the training not having been completed satisfactorily, the total period of probation will be correspondingly extended.

NOTE (ii).—Probationers will also have to undergo training at the Railway Staff College, Baroda. The test in the Staff College is compulsory and a second chance in the event of failure, will not be given except in exceptional circumstances and provided the record of the Officer is such that such a relaxation may be made. Failure to pass the test may involve the termination of service and in any case the officers will not be confirmed till they pass the tests, their period of training and/or probation being extended as necessary.

NOTE (iii).—In the Signal Engineering Department, on Railways where there are specialised Tele-Communications posts, an additional training for a period of six months in Tele-Communications may be arranged in any particular cases.

(2) (a) Probationers will not be permitted to apply for appointment elsewhere or appear for examination or selection for recruitment to other services.

(b) In cases where Probationers have already appeared at the Combined Competitive Examinations prior to their allotment to the Railway Service and qualify for appointment to services other than the Railway Services, the question of their release from Railway Service will be considered only when they are prepared to refund in cash the cost of their training and other moneys paid to them during the period of their probation before they are actually relieved.

(3) Probationers should have already passed or should pass during the period of probation an examination in Hindi in the Dev Nagri script of an approved standard. This examination may be the "PRAVEEN" Hindi Examination which is conducted by the Directorate of Education, Delhi Administration, or one of the equivalent Examinations recognised by the Central Government.

No probationary officer can be confirmed or his pay in the time scale raised to Rs. 450.00 per month unless he fulfils this requirements; and failure to do so will involve liability to termination of service. No exemption can be granted.

(4) Officers recruited under these rules :—

(a) will be eligible to pensionary benefits; and

(b) shall subscribe to the State Railway (non-contributory) Provident Fund under the Rules of that Fund, as applicable to railway servants.

(5) Pay will commence from the date of joining service. Service for increments will also count from the same date. Particulars as to pay are contained in sub-para (9).

(6) Officers recruited under these rules shall be eligible for leave in accordance with the rules for the time being in force as applicable to officers of Indian Railways. The Leave Rules are, however, liable to revision in the light of the Pay Commission's recommendations. They will not be permitted to retain the present leave Rules, if so decided by the Government.

(7) Officers will ordinarily be employed throughout their service on the Railway to which they may be posted on first appointment and will have no claim, as a matter of right, to transfer to some other Railway. But the Government reserve the right to transfer such officers, in the exigencies of service, to any other Railway or project in or out of India. Officers will be liable to serve in the Stores Department of Indian Railways if and when called upon to do so.

(8) The relative seniority of officers appointed under these rules will ordinarily be determined by their order of merit in the competitive examination. The Government of India, however, reserve the right of fixing seniority at their discretion in individual cases. They also reserve the right of assigning to officers appointed otherwise than by a competitive examination positions in the seniority list at their discretion.

NOTE.—If the period of training and consequently the period of probation is extended in any particular case due to the training not having been completed satisfactorily the officer concerned is liable to lose in seniority.

(9) The following are the rates of pay admissible :—

Junior Scale : Rs. 400—400—450—30—600—35—670—EB—35—950.

Senior Scale : Rs. 700—(6th year and under)—40—1,100—50/2—1,250.

Junior Administrative Grade : Rs. 1,300—60—1,600.  
Senior Administrative Grade :—

Indian Railway Service of Engineers & Mechanical Engineering & Transportation (Power) Department  
Rs. 1,800—100—2,000—125—2,250.

Signal Engineering Department and Electrical Engineering Department Rs. 1,800—100—2,000.

NOTE.—(i) Probationary officers will start on the minimum of the junior scale and will count their service for increment from the date of joining. They will, however, be required to pass any departmental examination or examinations that may be prescribed before their pay can be raised from Rs. 400.00 to Rs. 450.00 P.M. in the time scale.

Increment from Rs. 400.00 to Rs. 450.00 will not be granted if they fail to pass the Departmental examination within the first two years of the training and probationary period. In cases where the training period has to be extended for failing to pass all the Departmental Examinations within the stipulated period, on their passing the departmental examinations after expiry of the extended period of training their pay from the date following that on which the last examination ends, will be fixed at the stage in the time scale which they would have otherwise attained but no arrears of pay would be allowed to them. In such cases the date of future increments will not be affected.

The increments from Rs. 400.00 to Rs. 450.00 and from Rs. 450.00 to Rs. 480.00 may however, be granted in advance during the period of probation, if the probationary officer passes the first and second departmental examinations respectively in accordance with extant instructions.

NOTE (ii).—In the case of persons already in Government Service, their pay on appointment as probationer will be fixed in accordance with the rules and regulations in force from time to time.

(10) The increments will be given subject to sub-para to Note (i) under sub-para (9) above for approved service only, and in accordance with the rules of the Department.

(11) Any person appointed on the results of this competitive examination shall, if so required, be liable to serve in any Defence Service or post connected with the Defence of India, for a period of not less than four years including the period spent on training, if any;

Provided that such person—

(a) shall not be required to serve as aforesaid after the expiry of ten years from the date of appointment;

(b) shall not ordinarily be required to serve as aforesaid after attaining the age of forty years.

(12) Promotions to the administrative grades are dependent on the occurrence of vacancies in the sanctioned establishment and are made wholly by selection, mere seniority does not confer any claim for such promotion.

(13) In all matters not specifically provided for herein, the probationary officers will be governed by the provisions, of the Indian Railway Codes as amended from time to time and other orders in force issued by competent authorities.

**2. Central Engineering Service, Class I, Central Engineering Service, Class II (Permanent), Central Electrical Engineering Service, Class I and Central Electrical Engineering Service, Class II (permanent).**

(a) The selected candidates will be appointed on probation for two years. On completion of the period of probation, if they have passed the prescribed departmental examinations and are considered fit for permanent appointment, they will be confirmed in their appointments. Government may extend the period of probation of two years.

If on the expiration of the period of probation or of any extension thereof, Government are of opinion that the officer is not fit for permanent employment, or if at any time during such period of probation or extension, they are satisfied that the officer will not be fit for permanent appointment on the expiration of such period or extension, they may discharge the officer or pass such order as they think fit.

Probationers will also be required to pass a test in Hindi before confirmation.

(b) Any person appointed on the results of this competitive examination shall, if so required, be liable to serve in any Defence Service or post connected with the Defence of India, for a period of not less than four years including the period spent on training, if any;

Provided that such person—

(a) shall not be required to serve as aforesaid after the expiry of ten years from the date of appointment;

(b) shall not ordinarily be required to serve as aforesaid after attaining the age of forty years.

(c) The following are the rates of pay admissible :

Central Engineering Service, Class I and Central Electrical Engineering Service, Class I :—

Junior Scale : Rs. 400—400—450—30—600—35—670—EB—35—950.

Senior Scale : Rs. 700—40—1,100—50/2—1,250.

Administrative (Selection) Posts :

Superintending Engineers : Rs. 1,300—60—1,600—100—1,800.

Additional Chief Engineers : Rs. 2,000/- fixed (For Central Engineering Service, Class I only).

Chief Engineer : Rs. 2,250/- fixed (For Central Engineering Service, Class I only).

Central Engineering Service, Class II and Central Electrical Engineering Service, Class II.

Rs. 350—25—500—30—590—EB—30—800—EB—30—830—35—900.

**3. Indian Inspection Service and Indian Supply Service :—**

(a) Selected candidates will be appointed on probation for a period of two years. On completion of the period of probation, the officers, if considered fit for permanent appointment will be confirmed in their appointments subject to availability of permanent posts. The Government may extend the period of two years of probation.

If on the expiration of the period of probation or any extension thereof, the Government are of the opinion that an officer is not fit for permanent employment, or if at any time during such period of probation or extension thereof, they are satisfied that any officer will not be fit for permanent appointment on the expiration of such period or extension they may discharge the officer or pass such order as they think fit.

The officers will also be required to pass a prescribed test in Hindi before confirmation.

(b) Any person appointed on the results of this competitive examination shall, if so required, be liable to serve in any Defence Service or post connected with the Defence of India, for a period of not less than four years including the period spent on training, if any;

Provided that such person—

(a) shall not be required to serve as aforesaid after the expiry of ten years from the date of appointment;

(b) shall not ordinarily be required to serve as aforesaid after attaining the age of forty years.

(c) The following are the rates of pay admissible :—

Grade III, Junior Class I Scale	400—400—450—30— 600—35—670— EB—35—950
Grade II—Senior Class I Scale	700—40—1,100—50/2 1,250
Grade I—Administrative Selection Posts	1,300—60—1,600 (With a Selection Grade of Rs. 1,600 —100—1,800)
Super time-scale posts	(a) 1800—100—2,000 (b) 2,250 (For Indian Supply Service only).

#### 4. Military Engineer Services, Class I:—

(a) The selected candidates will be appointed on probation for a period of two years. A probationer during his probationary period may be required to pass such departmental and language tests as Government may prescribe. If, in the opinion of Government, the work or conduct of an officer on probation is unsatisfactory or shows that he is unlikely to become efficient or if the probationer fails to pass the prescribed tests during the period, Government may discharge him. On the conclusion of the period of probation, Government may confirm the officer in his appointment or if his work or conduct has in the opinion of Government been unsatisfactory, Government may either discharge him or extend the period of probation for such further periods as Government may consider fit.

Probationers will also be required to pass a test in Hindi before confirmation.

(b) (i) The selected candidates shall, if so required, be liable to serve as Commissioned Officers in the Armed Forces for a period of not less than four years including the period spent on training if any; provided that such a candidate (i) shall not be required to serve as aforesaid after the expiry of ten years from the date of appointment; and (ii) shall not ordinarily be required to serve as aforesaid after attaining the age of forty years.

(ii) The candidate shall also be subject to Civilians in Defence Services (Field Service Liability) Rules of 1957 published under S.R.O. No. 92 dated 9th March, 1957. They will be medically examined in accordance with the medical standards laid down therein.

(c) The following are the rates of pay admissible :—

	Rs.
Assistant Executive Engineer	400—400—450—30—
Assistant Surveyor of Works	600—35—670—
Assistant Technical Examiner	EB—35—950.
Executive Engineer	700—40—1,100—
Surveyor of Works	50/2—1,250.
Technical Examiner	
Superintending Engineer	1,300—60—1,600—
Superintending Surveyor of Works	100—1,800.
Superintending Technical Examiner	
Chief Technical Examiner	Under Consideration
Chief Surveyor of Works	1,800—100—2,000.

#### 5. Indian Ordnance Factories Service, Class I:—

(a) Selected candidates will be appointed as Assistant Managers (Probationers). The period of probation will be three years. The period of probation may be reduced or extended by the Government on the recommendation of the Director General, Ordnance Factories. An Assistant Manager (Probationer) will undergo such practical training as shall be provided by Government and may be required to pass such departmental and language tests as Government may prescribe. The language tests will include a test in Hindi.

On the conclusion of his period of probation, Government will confirm the officer in his appointment. If, however, during or at the end of the period of probation his work or conduct has in the opinion of Government been unsatisfactory, Government may either discharge him or extend his period of probation for such period as Government may think fit.

(b) (i) Selected candidates shall, if so required, be liable to serve as Commissioned Officers in the Armed Forces for a period of not less than four years including the period spent

on training if any; provided that such person (i) shall not be required to serve as aforesaid after the expiry of ten years from the date of appointment and (ii) shall not ordinarily be required to serve as aforesaid after attaining the age of forty years.

(ii) The candidates shall also be subject to Civilians in Defence Services (Field Service Liability) Rules 1957, published under S.R.O. No. 92 dated 9th March, 1957. They will be medically examined in accordance with the medical standards laid down therein.

(c) The following are the rates of pay admissible :—

	Rs.
	Junior Scale:
Assistant Manager	400—400—450—30—
Technical Staff Officer	600—35—670— EB—35—950.
Deputy Manager/Deputy Assistant Director General Ordnance Factories	Senior Scale: 700—40—1,100—50/2 —1,250
Manager/Senior Deputy Assistant Director General, Ordnance Factories	1,100—50—1,400
Deputy General Manager/General Manager, Grade II/Assistant Director General Ordnance Factories, Gr. II	1,300—60—1,600
General Manager, Grade I/Assistant Director General, Ordnance Factories Grade I	1,600—100—1,800
General Manager (Selection Grade) Deputy Director General, Ordnance Factories	1,800—100—2,000
Additional Director General, Ordnance Factories	2,250—125—2,500
Director General Ordnance Factories	Not yet fixed.

#### 6. Telegraph Engineering Service, Class I:—

(a) Appointments will be made on probation for a period of two years. If, in the opinion of Government, the work or conduct of an officer on probation is unsatisfactory, or shows that he is unlikely to become efficient, Government may discharge him forthwith. On the conclusion of his period of probation, Government may confirm the officer in his appointment if permanent vacancies are available or if his work or conduct has in the opinion of the Government been unsatisfactory, Government may either discharge him from the service or may extend his period of probation for such further period as the Government may think fit.

Officers will be required to pass any departmental examination or examinations that may be prescribed during the period of probation. They will also be required to pass a test in Hindi before confirmation.

(b) Officers will also be required to pass professional and language Tests.

(c) Any person appointed on the results of this competitive examination shall, if so required, be liable to serve in any Defence Service or post connected with the Defence of India, for a period of not less than four years including the period spent on training, if any;

Provided that such person—

(a) shall not be required to serve as aforesaid after the expiry of ten years from the date of appointment;

(b) shall not ordinarily be required to serve as aforesaid after attaining the age of forty years.

(d) The following are the rates of pay admissible :—

Junior Scale:—Rs. 400—400—450—30—600—35—670—  
EB—35—950.

Senior Scale:—Rs. 700—40—1,100—50/2—1,250.

Junior Administrative Grade:—Rs. 1,300—60—1,600.

Senior Administrative Grade:—Rs. 1,800—100—2,000.

Members (P & T Board):—Rs. 2,250.

#### 7. Central Engineering Service (Roads), Class I:—

(a) The selected candidates will be appointed as Assistant Engineer Consultant on probation for two years. On the completion of the period of probation, if they are considered fit for permanent appointment, they will be confirmed as Assistant Engineer Consultant if permanent vacancies are available. The Government may extend the period of probation of two years.

If on the expiration of the period of probation or of any extension thereof, Government are of the opinion that an Assistant Engineer Consultant is not fit for permanent employment or if at any time during such period of probation or extension they are satisfied that an Assistant Engineer Consultant will not be fit for permanent appointment on the expiration of such period or extension, they may discharge the Assistant Engineer Consultant or pass such order as they think fit.

The officers will also be required to pass a test in Hindi before confirmation.

(b) Any person appointed on the results of this competitive examination shall, if so required, be liable to serve in any Defence Service or post connected with the Defence of India, for a period of not less than four years including the period spent on training, if any;

Provided that such person—

(a) shall not be required to serve as aforesaid after the expiry of ten years from the date of appointment;

(b) shall not ordinarily be required to serve as aforesaid after attaining the age of forty years.

(c) The following are the rates of pay admissible—

Higher Class I posts (Assistant Engineer/Executive Engineer)—Rs. 400—400—450—30—600—35—670—EB—35—950.

Senior Class I (Selection) Post (Divisional Engineer/Assistant Engineer)—Rs. 700—40—1,100—50/2—1,250.

Administrative (Selection) Class I Post (Planning Officers)—Rs. 1,300—60—1,600.

Deputy Bridge Officer—Rs. 1,300—60—1,600.

Deputy Standards Officer—Rs. 1,300—60—1,600.

Deputy Materials and Plant Officer—Rs. 1,300—60—1,600.

Senior Planning Officer—Rs. 1,600—100—1,800.

Deputy Consulting Engineer (Roads)—Rs. 1,400—100—1,800.

(Posts carrying the same scales of pay are interchangeable except that of Deputy Materials and Plant Officer).

#### Higher Administrative (Selection) Class I Posts:

Additional Consulting Engineering (Budgets)—Rs. 1,500—100—2,000.

Additional Consulting Engineer (Roads)—Rs. 1,300—100—2,000.

Consulting Engineer (Road Development)—The prescribed scale for the post is under consideration.

#### 8. Central Water Engineering (Class I) Service and Central Power Engineering (Class I) Service:—

(i) Persons recruited to the posts of Assistant Director/Assistant Executive Engineer/Research Officer in the Central Water and Power Commission shall be on probation for a period of two years.

Provided that the Government may, where necessary, extend the said period of two years for a further period not exceeding one year.

If on the expiration of the period of probation referred to above or any extension thereof, as the case may be, the Government are of the opinion that a candidate is not fit for permanent appointment or if at any time during such period of probation or extension, they are satisfied that he will not be fit for permanent appointment on the expiration of such period of probation or extension, they may discharge or revert him to his substantive post or pass such order as they think fit.

During the period of probation, the candidate may be required by the Government to undergo such course of training and instructions and to pass such examinations and tests as it may think fit, as a condition of satisfactory completion of probation.

(ii) Any person appointed on the results of this competitive examination shall, if so required, be liable to serve in any Defence Service or post connected with the Defence of India, for a period of not less than four years including the period spent on training, if any.

Provided that such person—

(a) shall not be required to serve as aforesaid after the expiry of ten years from the date of appointment;

(b) shall not ordinarily be required to serve as aforesaid after attaining the age of forty years.

(iii) The officers appointed to the posts of Assistant Director/Assistant Executive Engineer/Research Officer can look forward to promotion to higher grades of Deputy Director/Executive Engineer, Superintending Engineer/Director (Ordinary Grade), Director/Superintending Engineer (Selection Grade) and Chief Engineer, after fulfilling the prescribed conditions.

The scales of pay for Class I engineering posts in Central Water and Power Commission are as follows:—

#### (Civil and Mechanical Posts in the Water Wing)

	Rs.
1. Assistant Director/Assistant Executive Engineer	400—400—450—30—600—35—670—EB—35—950
2. Deputy Director/Executive Engineer	700—40—1,100—50/2—1,250
3. Superintending Engineer/Director (Ordinary Grade)	1,300—60—1,600—100—1,800
4. Director (Selection Grade) Superintending Engineer (Selection Grade)	1,600—100—2,000
5. Chief Engineer	2,000 (fixed)

#### (Electrical and Mechanical Posts in the Power Wing)

	Rs.
1. Assistant Director/Assistant Executive Engineer/Research Officer	400—400—450—30—600—35—670—EB—35—950
2. Deputy Director/Executive Engineer	700—40—1,100—50/2—1,250
3. Superintending Engineer/Director (Ordinary Grade)	1,300—60—1,600—100—1,800
4. Director (Selection Grade)	1,600—100—2,000
5. Deputy Chief Engineer	1,800—100—2,000
6. Chief Engineer	2,000 (fixed)

#### 9. Posts of Assistant Drilling Engineer, GSI (Class I):—

Persons recruited to the posts of Assistant Drilling Engineer, GSI, shall be on probation for a period of two years. Their probationary capacity will be on probation for a period of two years. Extension in service for a further period over 2 years shall be on assessment of their work during the period of probation. This period may be extended at the discretion of the Government. They will receive pay in the scale of Rs. 400—400—450—30—600—35—670—EB—35—950 (Revised). On completion of their period of probation, if they are considered fit for permanent appointment, they will be considered for confirmation according to rules subject to the availability of substantive vacancies.

The persons appointed to the posts of Assistant Drilling Engineer, GSI, if so required, will be liable to serve in any Defence Service or post connected with the Defence of India, for a period of not less than four years including the period spent on training, if any.

Provided that such a person—

(a) shall not be required to serve as aforesaid after the expiry of ten years from the date of appointment as Assistant Drilling Engineer, GSI; and

(b) shall not ordinarily be required to serve as aforesaid after attaining the age of forty years.

The following is the field of promotion open to those found fit according to the rules and instructions on the subject.

#### Scale & Scale of Pay

(i) Deputy Drilling Engineer:—700—40—1,100—50/2—1,250.

(ii) Drilling Engineer:—1,300—60—1,600.

(iii) Chief Drilling Engineer:—1,600—100—1,800.

Persons recruited to the G.S.I. will be required to serve in India or outside the country.

#### 10. Post of Assistant Manager, Class I in the P. & T. Workshops Organisation:—

Any person appointed on the results of this competitive examination shall, if so required, be liable to serve in any Defence Service or post connected with the Defence of India, for a period of not less than four years including the period spent on training, if any;

Provided that such person—

(a) shall not be required to serve as aforesaid after the expiry of ten years from the date of appointment;

(b) shall not ordinarily be required to serve as aforesaid after attaining the age of forty years.

The scales of pay for engineering posts in the P. & T. Workshops Organisation are as follows:—

1. Assistant Manager:—Rs. 350—25—500—30—550—EB—30—600—EB—30—830—35—950.

2. Assistant Manager:—Rs. 400—400—450—30—600—35—670—EB—35—950.

3. Assistant General Manager/Senior Engineer:—Rs. 700—40—1,100—50/2—1,250.

4. Deputy General Manager/Manager, Workshops:—Rs. 1,300—60—1,600.

5. General Manager, P. & T. Workshops:—Rs. 1,800—100—2,000.

#### 11. Post of Assistant Executive Engineer, Class I/Assistant Engineer, Class II in the P. & T. Civil Engineering Wing:—

Any person appointed on the results of this competitive examination shall, if so required, be liable to serve in any Defence Service or post connected with the Defence of India, for a period of not less than four years including the period spent on training, if any;

Provided that such person—

(a) shall not be required to serve as aforesaid after the expiry of ten years from the date of appointment;

- (b) shall not ordinarily be required to serve as aforesaid after attaining the age of forty years.

The scales of pay for engineering posts in the P. & T. Civil Engineering Wing are as follows:—

1. Assistant Engineer:—Rs. 350—25—500—30—590—EB—30—800—EB—30—830—35—900.
2. Assistant Executive Engineer:—Rs. 400—400—450—30—600—35—670—EB—35—950.
3. Executive Engineer:—700—40—1,100—50/2—1,250.
4. Superintending Engineer:—Rs. 1,300—60—1,600—100—1,800.
5. Chief Engineer:—Rs. 2,000.

**12. Other permanent/temporary posts carrying generally the following Scales of pay:—**

	Rs.
(i)	400—950
(ii)	350—900

Any person appointed on the results of this competitive examination shall, if so required, be liable to serve in any Defence Service or post connected with the Defence of India, for a period of not less than four years including the period spent on training, if any;

Provided that such person—

- (a) shall not be required to serve as aforesaid after the expiry of ten years from the date of appointment;
- (b) shall not ordinarily be required to serve as aforesaid after attaining the age of forty years.